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ABSTRACT

This guide has been developed to help Comprehensive Employment and Training Act (CETA) prime sponsors to meet their responsibility for assessing the effectiveness of their efforts by examining the extent to which CETA participation has enhanced the longer-term income and employability status of former enrollees. As part 2 of the guide, this document provides a more in-depth treatment of the issues covered in part 1 and contains the following: (1) an overview of the program evaluation in the employment and training system; (2) a discussion of the necessary types and sources of local follow-up data; (3) a discussion of the actual operation of a follow-up system, including the design of survey instruments, the selection of an organizational approach, and the location, contact, and interview of former CETA participants; and (4) a review of issues related to analyzing local follow-up data, including an illustration of alternative analytical approaches. These topics are covered in four chapters. The final part of the report contains technical appendixes such as sample survey instruments, wage and tax statements, and a review of sampling procedures. (KC)

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DESIGNING AND IMPLEMENTING LOCAL FOLLOW-UP SYSTEMS

PART II: CONDUCTING OUTCOMES EVALUATION ON THE LOCAL LEVEL

CETA: MANAGEMENT INFORMATION SYSTEMS PROGRAM

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INTRODUCTION

The passage of the Comprehensive Employment and Training Act of 1973 marked a major effort to establish a decentralized approach to the delivery of employment and training services. Under CETA, primary responsibility for planning, designing and operating employment and training programs was shifted from the federal to the state and municipal levels. Since the needs of local labor markets differ substantially across regions of the nation, it was reasoned that local policy and planning officials could best identify the needs of their communities and most effectively tailor service strategies designed to address those needs.

As part of this shift in authority to the local level, prime sponsors are responsible for assessing the effectiveness of their efforts by examining the extent to which CETA participation has enhanced the longer-term income and employability status of former enrollees. Designing and Implementing Local Follow-Up Systems has been developed to help prime sponsors meet this responsibility and consists of two parts.

Part I: Minimum Recommended Prime Sponsor Follow-Up System contains:

- A series of recommendations designed to facilitate the implementation of a minimum follow-up capability;
- A recommended participant follow-up questionnaire; and
- A set of sample data tables which can be used to facilitate the production of prime sponsor follow-up reports.

Part II: Conducting Outcomes Evaluation on the Local Level provides a more in-depth treatment of the issues covered in Part I and contains:

- An overview of program evaluation in the employment and training system;
- A discussion of the necessary types and sources of local follow-up data;
- A discussion of the actual operation of a follow-up system, including the design of survey instruments, the selection of an organizational approach, and the location, contact and interview of former CETA participants; and
- A review of issues related to analyzing local follow-up data, including an illustration of alternative analytical approaches.

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CHAPTER ONE

AN OVERVIEW OF PROGRAM EVALUATION IN THE EMPLOYMENT AND TRAINING SYSTEM

AN OVERVIEW OF PROGRAM EVALUATION IN THE EMPLOYMENT AND TRAINING SYSTEM

I. THE ROLE AND TYPES OF PROGRAM EVALUATION

The enactment of the Comprehensive Employment and Training Act of 1973 represented a major departure from the centralized and categorical nature of decision-making and program structure that had previously existed.[1] Under CETA basic decision-making authority was shifted from the U.S. Department of Labor to eligible units of state and local government known as CETA prime sponsors. This shift gave prime sponsors the responsibility for effectively responding to the employment and training needs of their local jurisdictions through the planning, administration and evaluation of their own employment and training programs.

To successfully execute this responsibility, prime sponsors must have a well developed set of management capabilities, including that of program evaluation. Once the prime sponsor has identified the employment and training needs of its area and has developed a services mix to meet specific local objectives, program evaluation is needed to determine how well programs work, and which ones work best, for whom, and at what costs.

The assessment of program performance can be viewed from several different perspectives. While the evaluation literature contains references to, and definitions of, many types of evaluation, the following four classes appear most frequently:[2]

- o **Process Evaluation**

  This class of evaluation focuses on program operations. It seeks to determine if program activities, e.g., assessment, training services, or job development, are being provided according to what was planned, if the planned number and types of participants are being served, and if the planned number and types of terminations are being achieved.

- o Outcomes or Impact Evaluation

  In contrast to process evaluation, this type focuses on program outputs and determines the degree to which the longer-term goals of a program, such as enhanced employment stability or gains in earned income, have been achieved.

- o Comprehensive Evaluation

  A comprehensive evaluation emerges when the results of process and outcomes evaluation are combined. This type of evaluation gives a more complete appraisal of program performance and can provide substantial insight into reasons for program success and failure, and ways in which performance can be improved.

- o Strategic Evaluation

  This class of evaluation attempts to determine which programs work best by comparing the effectiveness of alternative strategies designed to achieve similar objectives.

While each of these types of evaluation has a role to play within the employment and training system, policy-makers, administrators, and planners at each level of government will need different types of evaluative information. For instance, national officials can use process evaluations to assess the flow of participants through prime sponsors[3], and to make inter-sponsor comparisons of performance. In contrast, prime sponsors can rely on process evaluations to assess the movement of participants through the local delivery system, its individual programs, and, when applicable, contractors. Thus, while the basic issues that determine accountability are the same across levels of government, the specific questions and information needs vary. Distinguishing among these questions and needs is critical for determining the types and nature of evaluation most appropriate on the national, state, and local levels.

II. PROGRAM EVALUATION AT THE NATIONAL, STATE, AND LOCAL LEVELS

On the national level, evaluations of the CETA program are necessary to enable the Department of Labor to fulfill several key management and policy-making responsibilities. As stated in the 1978 CETA Amendments:

> "The Secretary shall provide for the continuing evaluation of all programs, activities, and research and demonstration projects conducted pursuant to this Act, including their cost-effectiveness in achieving the purposes of this Act, their impact on communities and participants, their implications for related programs, the extent to which they meet the needs of persons by age, sex, race, and national origin, and the adequacy of the mechanism for the delivery of services."[4]

To meet these responsibilities, evaluative information on the impact of the total CETA system and its major subparts and programs is needed to determine whether established goals and objectives have been achieved. Nationally based evaluations are also necessary to assess how well, and to what extent, the CETA system is serving those subgroups of the population identified as most in need of employment and training services.

National evaluation needs are generally met through the Continuous Longitudinal Manpower Survey (CLMS) and the Department of Labor's formal quarterly reporting system.[5] While the CLMS uses individual participant data collected from a representative sample of prime sponsors to generate estimates of program impact, the D.O.L. reporting system relies upon standardized prime sponsor quarterly reports to access the ongoing performance of local programs. Using these quarterly reports, the Department of Labor can determine if local program services are provided in a manner consistent with that planned.[6]

Although national evaluations may provide important information on the effectiveness of the CETA system, they are of limited use to local administrators and planners due to the diverse nature of prime sponsors. Given the highly aggregate nature of national evaluations, they cannot disentangle important differences in local program design and organization, or determine their influence on local program performance. Additionally, the categorizations of programs in nationally based evaluations may not closely match specific programs that prime sponsors operate on the local level. A classroom training program in one sponsor may provide long-term occupational training, while in another, it may consist of short-term training combined with job search assistance services.

Because prime sponsors have the responsibility for planning, administering, and evaluating employment and training programs within their jurisdictions, they require evaluative information that accurately reflects the nature and effectiveness of their own individual programs. As such, prime sponsors can use local evaluation to achieve operational control over programs, to determine the effectiveness of existing programs in achieving locally established goals and objectives, and to make decisions among alternative uses of program resources. Within this context, local program evaluations should be designed to address the following questions:

1. To what extent have the goals and objectives of the local delivery system been achieved?

2. Have the observed levels of performance been uniformly achieved across individual programs and population subgroups?

3. How can the performance of certain programs be sustained and that of others be improved?

By structuring local evaluation systems around these management questions, prime sponsors will be better able to manage their local employment and training delivery systems, and to make those adjustments necessary to improve program performance.

III. THE 1978 CETA AMENDMENTS AND LOCAL FOLLOW-UP EVALUATION

Among the types of evaluation potentially useful to prime sponsors is outcomes evaluation. Outcomes evaluation is needed to assess the ability of the local delivery system to produce a desirable set of participant outputs. To achieve this, however, prime sponsors must develop and implement local follow-up systems to track the post-program labor force experiences of CETA terminees.

In October 1978, the Congress reauthorized the CETA legislation for four more years, making substantive changes in the goals of the CETA program, its structure, and the administrative guidelines governing program operations and prime sponsor reporting responsibilities.[7] From a local evaluative perspective, the relevant change was the incorporation of specific language that training and employment opportunities

provided to participants "...result in an increase in their earned income".[8] Similarly, services provided under Title II of CETA were "...to ease barriers to labor force participation encountered by economically disadvantaged persons."[9] Given that measuring the performance of local programs in both producing gains in earned income and easing barriers to labor force participation requires information about the post-program labor force and income status of terminees, these changes in the CETA legislation clearly suggest the need for local participant follow-up surveys.

While the 1978 Amendments did not instruct prime sponsors to develop particular types of local follow-up systems, they did clarify the need for conducting follow-up surveys of terminees. Section 127 (d)(4) of the legislation requires that prime sponsors report to the Secretary of Labor "the types of outcomes that participants experience after the program."[10] Moreover, the current CETA regulations explain this requirement in Section 676.22 (d)(2) as follows:

> "(d) Each recipient shall establish and use procedures for the systematic assessment on a quarterly basis of program performance in relation to the goals contained in its grant. Recipients shall:
>
> ...(2) Establish and use procedures for collecting performance information (including information on the status of individuals subsequent to entering unsubsidized employment) and for assessing such information in terms of the goals in its grant..."[11]

These requirements are amplified in both the Forms Preparation Handbook (FPH) and a recent D.O.L. publication entitled, CETA: Management Information System Program, Functional Management Information System.[12] While the language in the FPH does little more than inform prime sponsors to use their discretion in deciding how to meet the follow-up requirement, the more recent publication clearly indicates the minimum types of follow-up data required to adequately assess longer-term program performance. Therefore, the main issue for prime sponsors is how to establish an effective follow-up capability that will provide useful information on program performance and support management decision-making. The primary purpose of this technical assistance guide is to address this issue.

FOOTNOTES TO CHAPTER ONE

1. 93rd Congress, Public Law 93-203, The Comprehensive Employment and Training Act of 1973, Washington, D.C., December, 1973.

   For a review of the events leading to the passage of CETA see:

   Davidson, Roger H., The Politics of Comprehensive Manpower Legislation, The John Hopkins University Press, Baltimore, Maryland, 1972.

2. For a review of alternative types and definitions of evaluation see:

   Rossi, Peter, Howard Freeman and Sonia Wright, Evaluation: A Systematic Approach, Sage Publications, Beverly Hills, California, 1979.

   Suchman, Edward, Evaluative Research: Principles and Practice in Public Service and Social Action Programs, Russell Sage Foundation, New York, NY, 1967.

   Sum, Andrew, Katherine Mazzeo, Francis McLaughlin and Jeffrey Zornitsky, Evaluating the Performance of Employment and Training Programs at the Local Level, U.S. Department of Labor, Employment and Training Administration, Boston, Mass., 1978.

   U.S. Department of Labor, Manpower Administration, Program Assessment Guide for Prime Sponsors Under the Comprehensive Employment and Training Act of 1973, Washington, D.C., April, 1974.

3. Currently, the D.O.L.'s ongoing assessment of local performance does rely upon both an examination of aggregate flows of participants through prime sponsors as the unit of observation and inter-sponsor comparisons for judging performance. For a review and critique of this process see:

   Zornitsky, Jeffrey, The Use of Performance Indicators for Assessing Title II Programs: A Critical Examination of the Performance Review Guidelines, Policy and Evaluation Division, Department of Manpower Development, Boston, Mass., 1980.

4. 95th Congress, Public Law 95-524, Comprehensive Employment and Training Act Amendments of 1978, Washington, D.C., October, 1978, Section 313(a).

5. Detailed discussions of both the CLMS and D.O.L. reporting systems can be found in:

   Brandwein, Seymour, Evaluation of Employment and Training Program Effects on Participants: The "Continuous Longitudinal Manpower Survey", U.S. Department of Labor, Employment and Training Administration, Washington, D.C., December, 1978.

   Zornitsky, Jeffrey, op. cit.

6. In addition to assessing the performance of prime sponsor programs, the Department of Labor conducts an annual review of local administrative operations. For a review of the focus and contents of this review see:

   U.S. Department of Labor, Employment and Training Administration, Fiscal Year 1981 National CETA Assessment Handbook, Washington, D.C., November, 1980.

7. Among the major and more general changes introduced by the 1978 CETA Amendments were those focused on participant eligibility criteria, the master and annual plans, increased involvement of the private sector, program accountability, and limitations on the duration of participation in a CETA program. See:

   95th Congress, op. cit.

8. In the original 1973 legislation, the Statement of Purpose provides that "...training and other services lead to maximum employment opportunities and enhance self-sufficiency..." Similar language that cannot be readily translated into quantifiable measure for evaluative purposes was included in the description of Title I (now Title II) programs. Programs funded under Title I were "...to enable individuals to secure and retain employment at their maximum capacity." See:

   95th Congress, op. cit., Section 2.

   93rd Congress, Public Law 93-203, The Comprehensive Employment and Training Act of 1973, Washington, D.C., 1973, Sec. (2), and Sec. 101.

9. 95th Congress, op. cit., Sec. 201.

10. Ibid., Section 127 (d)(4).

11. U.S. Department of Labor, Employment and Training Administration, Comprehensive Employment and Training Act Regulations, Final Rule and Proposed Rule, Washington, D.C., Section 676.22 (d)(2).

12. U.S. Department of Labor, Employment and Training Administration, Forms Preparation Handbook for Prime Sponsors Under the Comprehensive Employment and Training Act Amendments of 1978, Washington, D.C., May, 1980, Sec. VI-50.

    U.S. Department of Labor, Employment and Training Administration, CETA: Management Information System Program, Functional Management Information System, Washington, D.C., July, 1980. See p.17 for follow-up recommendations.

DESIGNING A LOCAL FOLLOW-UP DATA BASE

I. INTRODUCTION

The primary purpose of local follow-up is to provide those data necessary to measure and analyze the longer-term outputs of the local employment and training system. When designing a follow-up system, prime sponsors must first select the types, nature, and sources of data to be included in their follow-up data bases. Choices among the available alternatives will have a direct bearing on the outcomes data available for analysis, the comprehensiveness and timeliness of the follow-up data, and their usefulness for local decision-making.

The purpose of this chapter is to present and discuss key issues involved in the design of a local follow-up data base. The discussion is divided into the following four areas:

- Selecting the types and nature of data to be included in a local follow-up system;
- Selecting the types of terminees and the scope of program coverage that will form the basis of the follow-up effort;
- Determining the appropriate length of the follow-up period and the frequency at which follow-up data will be collected; and
- Choosing the appropriate sources of data, e.g., institutional sources or direct participant contacts, for use as the primary means of gathering follow-up data.

II. SELECTING THE TYPES AND NATURE OF DATA FOR A LOCAL FOLLOW-UP DATA BASE

For prime sponsors, outcomes evaluation is a management tool which provides specific information on the relative longer-term success of alternative program strategies, which ones worked best and for whom, and the factors responsible for producing variations in program performance. With the information derived from outcomes evaluation, prime sponsors should be in a better position to make those adjustments necessary to improve the performance of their delivery systems.

As was discussed in Chapter One, this view of outcomes evaluation can be expressed in three management questions:

1. To what extent have the goals and objectives of the local delivery system been achieved?

2. Have the observed levels of success been uniformly achieved across individual programs and population subgroups?

3. How can the performance of certain programs be sustained and that of others improved?

To address the first question, prime sponsors must select those data that best reflect the goals and objectives of their local delivery systems. Since the primary goal of CETA programs is to enhance the income and employment status of program participants, prime sponsors should focus their data collection efforts on alternative economic measures of local performance, such as those relating to the labor force status, employability, and earned income of terminees. As shown in Table 2-1, several types of labor market related data are available for potential use by prime sponsors, including the earned income of CETA terminees. As a measure of program performance, earned income is the most direct and inclusive indicator of program effectiveness in that it reflects one explicit goal of the CETA program and is a composite indicator of the total post-program labor force experiences of terminees.[1]

There are several reasons why prime sponsors should gather other types of labor market related data in addition to participants' post-program earned income. The first is that a given level of earned income can be produced through various combinations of participants' average hourly wages, weeks of employment, and total hours worked. If, for instance, post-program hourly wages and hours worked are the same across participants, but weeks of employment differ, variations in earned income will be observed. Similarly, different levels of either or both hourly wages and hours will produce different levels of earned income for a given period of employment. Since there may be differences in the way local programs are designed to impact post-program earned income, distinguishing among these income components is

Table 2-1: Potential Types of Outcomes Data Upon Which to Focus A Local Follow-Up Data Base

Economic Measures	Non-Economic Measures
Annual Earnings	School Enrollment Status
Hourly Wage Rates	Participation in Another Training Program
Hours Worked Per Week	Enlistment in the Armed Forces
Weeks of Employment	Self-Confidence
Weeks of Unemployment	Job Satisfaction
Labor Force Status At Time of Follow-Up Interview	
Occupational Mobility	
Job Retention	
Public Assistance Status	
Unemployment Insurance Status	

important when assessing program effectiveness. For example, in an occupational training program, services are likely designed to impact participants' earned incomes by enabling them to secure higher paying jobs than they would have been able to without the program. In contrast, an adult work experience program is probably geared to impact its participants' earned income by improving their level of employment rather than their hourly wages. Complete reliance on earned income as an indicator of effectiveness may, therefore, not fully reflect the actual mix or objectives of local programs, and could serve to obscure well informed judgements of local performance.

Other reasons for broadening the scope of local follow-up data collection include the likely need for both additional post-program performance measures and an understanding of participants' labor force behavior. In the first case, the diversity of program objectives inherent in a local delivery system may very well require prime sponsors to use several different performance measures when assessing program effectiveness. These measures can include post-program job retention, occupational mobility, and the likelihood of employment, all of which may reflect the objectives of specific programs or the particular concerns of the prime sponsor and its program operators.

The main reason for using follow-up data to gain insights into participants' post-program labor force behavior status is the need for feedback on how to improve the performance of local programs. Although judgements of program effectiveness can be made with the use of specific performance measures, information on the events surrounding each measure can be quite useful for identifying where programs are most as well as least effective. For example, a low level of long-term program effectiveness can be due to a rapid withdrawal of participants from the labor force. If this is the case, information as to why participants choose not to participate in the labor force will be useful for identifying areas of program design that may need improvement. Issues related to participants' job search skills and self-confidence, as well as their day care and transportation assistance needs, can be identified and linked back to the program to improve its design.

In addition to economic measures of performance, there are also non-economic aspects of post-program performance that prime sponsors should consider when designing their local follow-up data bases. Table 2-1 lists several potential non-economic measures. For example, outcomes measures such as the level of participants' self-confidence and job satisfaction may be among those that prime sponsor programs are designed to impact. Moreover, participants' post-program school or training enrollment and military status are important types of (positive) outcomes which many programs, particularly those serving youth and younger adults, may be designed to affect. In these instances, assessments of program effectiveness require the use of non-economic as well as economic measures of performance.

While program effectiveness can be estimated through economic and non-economic performance measures, data on participants' views of the programs in which they participated represent additional information that can provide valuable insights into local performance. The participants' reasons for program enrollment, ratings of programs, and views on the major strengths and limitations of programs can be used together with more objective performance data to guage why certain programs succeeded and others failed.

Once the outcomes data necessary for local follow-up purposes are identified, prime sponsors must determine the types of information needed to address the second major question concerning the uniformity of program performance. This part of the evaluation process provides prime sponsors with the basis for making judgements of the relative effectiveness of their program strategies and the extent to which the local delivery system benefits certain target groups more or less than others. The information required to successfully address this issue includes two major types. The first is data on the actual programs in which individuals participated, while the second includes selected participant characteristics and should be designed to reflect the mix of target groups identified for services by the prime sponsor. The Department of Labor has already established some population characteristics as

significant segments, including participants' race, age, and sex. Prime sponsors should also consider using other characteristic data, such as participants' levels of education, public assistance status, and prior work histories.

While comparisons of program performance identify the strengths and weaknesses of the local delivery system, these findings alone will not clarify whether differences in performance are due to the programs themselves, the characteristics of participants served in the programs, or the relative effects of individual program strategies on particular population subgroups. To address these issues, prime sponsors must determine how the interaction of participants with programs results in a particular level of performance.[3] To accomplish this objective, detailed data must be available, as noted, on participants' characteristics and the nature and levels of their program participation.

Based on the above discussion, a local follow-up data base can be viewed as consisting of the following five primary types of data:

- Selected personal, social, and economic characteristics of participants.
- The type and level of services received by participants.
- The post-program income, employment, and labor force experiences of participants.
- The non-economic aspects of program performance, including areas such as school enrollment status and job satisfaction.
- Participants' views of the strengths and weaknesses of the programs in which they participated.

Once prime sponsors select the types of data to include in a local follow-up data base, they should turn their attention to key decisions regarding the nature of those data to be collected. These include choices between gross and net measures, and point-in-time and continuous performance measures. These two issues are addressed separately below.

A. Gross and Net Performance Measures

Gross measures of program performance reflect the absolute or total output of a program over the follow-up period. In the case of earned income, the gross effect of a program is measured by participants' total earnings during the post-program period. Similarly, other gross output measures include the total number of weeks of post-program employment experienced by terminees, their average hourly wage rates, and the number and percent employed at a particular point in time. In contrast, net measures of performance are intended to represent the independent contribution of program participation to the post-program income and employment experiences of former participants. Since many, if not most, program terminees would have obtained some employment and earnings in the post-program period, net outcomes are designed to reflect the differences between the actual experiences of terminees and those that would have occurred without the program. In the case of earned income, the net program effect is expressed by the change in gross earned income attributable to participation in a program.

There are two principle advantages associated with relying upon gross output measures to assess program performance. The first is that gross measures are relatively easy to construct and do not require very sophisticated evaluative techniques. Second, if highly correlated with long-term gains in employment and earnings, e.g. two years, gross performance measures can provide a straightforward approach for determining whether a program's outputs are consistent with its established objectives.[4]

Despite their simplicity, gross performance measures have several conceptual shortcomings. First, while may be possible to identify certain gross measures that are correlated with long-term improvements in participants' employment and earnings status, it will still not be fully clear whether or not and to what extent the observed outcome would have occurred without the program. A second shortcoming of gross measures is that they may create incentives for prime sponsors to serve the less disadvantaged members of their eligible populations. Since gross measures,

such as weeks of employment or hourly wage rates, are likely influenced by factors such as the age, sex, and education of participants, there may be an incentive to serve those individuals who would probably have relatively positive labor market experiences even in the absence of the program. Such groups could include white males and those with substantial prior work experience.

In contrast, net program measures address these shortcomings. This approach provides the basis for determining the independent contribution of program participation to the post-program labor force experiences of CETA terminees as well as an incentive to serve the more disadvantaged segments of the eligible population. Since the less disadvantaged usually perform well in the labor market, it is difficult for local programs to generate impressive gains in their levels of earnings and employment. As a result, prime sponsors would have an incentive to recruit and enroll those individuals with less rewarding pre-program employment and earnings experiences.

There are certain practical issues that prime sponsors should consider when using net performance measures. Most important is that precise measurements of net program outcomes require the availability of either a control or comparison group to provide a basis for determining what the employment and earnings experiences of participants would have been in the absence of program participation.[5] The observed differences between the actual post-program labor market experiences of participants and those of the control or comparison group represent the net effect of program participation.[6] From a practical perspective, however, the use of either control or comparison groups for local follow-up purposes may be beyond the resources, expertise, and program flexibility available to prime sponsors.

Without control or comparison groups, net measures of performance can be derived by comparing the pre- and post-program labor market experiences of the participants themselves. These before and after comparisons have been used in previous evaluations of employment and training programs although they do possess several important shortcomings.[7] First, any observed pre- to post-program improvements in the employment and earnings of participants may simply reflect the passage

of time, including increased maturity of younger participants, rather than the effects of the program alone. Second, differences between the pre- and post-program period may result partially from changes in local economic conditions rather than from program participation. Third, since some participants enter the CETA program after reaching a low point in their labor force and income status, part of the observed pre-post difference may reflect a movement back toward their more permanent career status. In these cases, before and after comparisons will overstate the effect of a program.[8]

The above discussion points out a number of important trade-offs in choosing between gross and net measures of performance. Conceptually, net outcomes measures are most desirable since they can isolate the unique contribution of program participation to terminees' employment and earnings experiences. Moreover, using net output measures may create incentives for prime sponsors and their program operators to serve the more disadvantaged members of the eligible population. However, practical considerations suggest that the resources, expertise, and program flexibility needed to construct precise estimates of net program outcomes may be too burdensome for many prime sponsors.

In light of these issues, prime sponsors may want to consider the use of gross performance measures. In this case, it is important, at a minimum, to identify those gross measures that are highly correlated with long-term gains in employment and earnings.[9] Although this precaution will not eliminate the potential tendency to serve the less disadvantaged, it will provide a basis for determining whether or not local programs are performing in a manner consistent with their long-term goals and objectives. In this way, the gross performance measures of alternative programs can be compared in order to assess their relative effectiveness in producing desirable participant outputs.

B. Continuous and Point-in-Time Performance Measures

Prime sponsors must also decide whether to focus upon point-in-time or continuous measures of program performance. Point-in-time measures, such as participants' labor force status or hourly wage rates at a particular juncture during the follow-up period, are simple to use. Since such measures do not require a detailed account of participants' post-program labor market activity, data collection efforts can be held to a minimum and will not necessitate the construction of more complex performance measures, such as earned income. Also, the use of point-in-time measures can be quite helpful for assessing the performance of prime sponsor delivery systems. For instance, by comparing the labor force status and hourly wage rates of terminees at different points during the follow-up period, prime sponsors can begin to judge the effectiveness of their delivery systems in impacting the longer-term employment and earnings of CETA terminees. Moreover, comparisons of these measures across alternative program strategies will allow local planners and administrators to gain substantial insights into the relative effectiveness of those programs.

Despite their advantages, point-in-time measures provide only a limited picture of participants' post-program labor force activity. For example, some individuals unemployed at a particular point during the follow-up period may have been employed for several, if not all of the preceeding months since program termination. In such cases, evaluative judgements based solely on labor force status may understate the true level of program effectiveness. The same type of problem prevails with other point-in-time measures, such as hourly wage rates or hours worked.

In this regard, continuous performance measures, such as total weeks worked, average earnings, or hourly wages, provide a more comprehensive and accurate assessment of program effectiveness. Although such measures will require a detailed account of the post-program labor force activities of terminees, they will give local planners and administrators more insight into how participants have allocated their time between employment and non-employment. Table 2-2 provides a summary of potential types of outcomes measures, by time dimension and type of effect to be measured.

Table 2-2: Potential Types of Outcomes Measures

Type of Measure	Gross Effect	Net Effect
Point-in-Time Measures	o Employment status at time of follow-up contact	o Increased likelihood of employment at time of follow-up contact
	o Hourly wage at time of follow-up contact	o Increases in hourly earnings at time of follow-up contact
	o Job retention status of initial placements at time of follow-up contact	o Increased likelihood of placements remaining with initial employers
Continuous Measures	o Total weeks worked during follow-up period	o Gains in number of weeks worked during follow-up period
	o Total earned income during the follow-up period	o Gains in earnings during follow-up period

III. SELECTING PARTICIPANTS TO BE INCLUDED IN THE LOCAL FOLLOW-UP DATA BASE

After selecting those data which should be included in a local follow-up base, prime sponsors need to identify those participants who will form the basis of their follow-up effort. When addressing this issue, prime sponsors will have to make the following key decisions:

- Whether to group participants by their data of enrollment or by date of termination;
- What types of terminees to follow-up;
- What level and scope of program operations to include in the follow-up survey; and
- Whether to employ sampling procedures.

Each of these four issues is addressed separately below.

A. The Use of Enrollment and Termination Dates for Selecting Participants

The first decision in selecting participants for follow-up is whether to group them according to the dates of their termination or the dates of program enrollment. If participants are classified according to their dates of enrollment, the follow-up survey will focus on individuals who were in the labor market during a similar time period prior to the program. Since differences in pre-program labor market conditions can influence measurements of post-program performance, using enrollment dates to select participants is one way to avoid biased judgements of program performance.[10]

In such cases, however, the length of the follow-up period will vary systematically with the duration of program participation. For example, assume that follow-up data is collected eighteen months after enrollment for individuals served in an occupational training program and in a job search assistance program. Since job search assistance programs tend to be much shorter than occupational training programs, the length of the post-program period for both groups of participants will be quite different. Because differences in the duration of labor force participation will likely influence individuals' employment and earnings experiences, variations in the follow-up period alone can result in differences in the observed levels of success of the two programs.

Another approach is to group participants according to their dates of termination. This assures that all participants will have been in the labor market for a uniform time period, and thus provides each program with an equal chance to work prior to any measurements of effectiveness. Since participants' post-program labor market activities form the basis for measuring outcomes, reliance on the date of termination may be the most effective and reliable approach for grouping program participants.

B. Selecting the Types of Program Terminees

The second issue requiring consideration is the selection of the types of terminees for whom data will be collected. Choices must be made between focusing data collection efforts on all terminees, job placed terminees, other positive terminees, or those individuals with "other" terminations. A key criterion for making this decision is the acquisition of data necessary for determining why certain programs were more or less successful than others.

Using this criterion suggests that data on the post-program labor market experiences of program "failures" as well as "successes" must be available. While this inclusive approach costs more than one focused upon a single group of terminees, it will enhance the utility of follow-up for decision-making. A local follow-up system will therefore be of maximum use to prime sponsors if it is based upon all types of terminees.

C. Selecting the Level and Scope of Program Operations

The level and scope of program operations for which post-program data will be made available will have an important bearing on the cost, required sample size, and usefulness of the local follow-up system for decision-making. Prime sponsors must choose whether to focus their follow-up efforts on the entire Title IIBC delivery system, its major program areas, such as occupational training and work experience, or on individual programs.

Although aggregate measures of performance will aid in judging the overall success of the local delivery system, they will be of limited use for identifying where changes are necessary or determining those adjustments needed to improve effectiveness. Since local employment and training delivery systems are comprised of a variety of diverse programs often operated by several different service providers, a useful follow-up data base is one focused upon individual program activities.

Beyond identifying the level of program operations for which follow-up data will be collected, prime sponsors must also decide the scope of programs to be included in their follow-up systems. While the most promising approach would be to include data on all programs in the local delivery system, this must be weighed against existing financial limitations and the objectives of each program. To the extent that the local delivery system is devoted primarily to the provision of particular types of programs, such as occupational or on-the-job training, prime sponsors may wish to forego collecting data on other less substantial program expenditures.

Additional factors that should be considered are the objectives of individual local programs. Many local programs, such as basic education and pre-vocational training, are designed to prepare participants for entrance into other programs geared specifically at enhancing their post-program employment and earnings status. Although follow-up data can be used to measure the post-program labor market experiences of individuals from these more "preparatory" of "feeder" programs, their practical use for decision-making will be limited since the programs' objectives are geared primarily at in-program gains in such areas as education and work attitudes.

D. The Use of Sampling for Local Follow-Up Purposes

The final consideration in selecting terminees for a local follow-up data base is whether or not and to what extent the prime sponsor should rely upon sampling. The purpose of sampling is to reduce the costs and scope of data collection while

maintaining the accuracy of the follow-up findings. Statistical results derived from a sample of participants should accurately reflect results which would be obtained by a study employing the entire population of participants. Whether or not sampling is possible depends directly upon the number of participants a prime sponsor has enrolled in its programs.

Typically, small prime sponsors will not always have enough participants enrolled in their programs to be able to take advantage of sampling procedures.[11] When attempts are made to sample participants from an already small level of program enrollments, the accuracy of any follow-up findings will be tenuous at best. For larger prime sponsors, sampling is most desirable for those activities with enough participants such that the resulting sample is representative of the total population. For instance, participants in occupational training programs may be sampled if the sample can be accurately stratified by certain participant characteristics of interest (e.g. age, race and sex), and is large enough to be representative of the entire enrollee population. In such cases, prime sponsors can realize substantial savings relative to the costs of conducting follow-up for all participants. A more detailed consideration of the issues involved in sampling is contained in Appendix H.

IV. IDENTIFYING AN APPROPRIATE FOLLOW-UP PERIOD

Since the primary purpose of a local follow-up system is to help prime sponsors make informed judgements of program effectiveness, local administrators and planners will place a premium on the timely availability of outcomes information. However, the need for current follow-up information must be balanced against considerations regarding the accuracy of the follow-up findings and their usefulness for portraying the longer-term effectiveness of local programs. Therefore, the post-program period must be long enough to reflect the permanent effects that programs have on participants' employment and earnings experience. Short follow-up periods, i.e. one to three months, tend to reflect only the immediate impact of a program and provide

little assurance that the impact will continue over time. By extending the follow-up period to six, twelve, or eighteen months, prime sponsors can derive a more accurate basis for assessing the longer-term effectiveness of local programs.

Prime sponsors must identify a follow-up period that can both meet their needs for timely information, and serve as the basis for making accurate judgements of post-program performance. Several existing studies show that post-program performance measures derived from six month follow-up information reliably predict gains in employment and earnings one year after program termination.[12] While longer follow-up periods may be even more reliable, the major advantage of a six month follow-up period is that it will generate timely information, some of which will cover the outputs of current programs.[13]

V. SOURCES OF DATA FOR LOCAL FOLLOW-UP

This section discusses various alternative data sources that prime sponsors can use to meet their follow-up information needs. The discussion focuses on the advantages and disadvantages of the most widely used data sources in light of the five basic criteria which are presented in Table 2-3. When reviewing possible data sources for use in local outcomes evaluation, prime sponsors must determine those criteria of greatest concern, and choose their data sources accordingly. A summary of the main sources for each type of data discussed previously in this chapter is provided in Table 2-4.

A. Sources of Outcomes Data

One major type of data which should be included in a prime sponsor follow-up data base is measures of program goals and objectives. These measures can be designed to reflect economic aspects of performance, such as earned income or total weeks worked, or non-economic program outcomes, such as job satisfaction, attendance in school, or enlistment in the Armed Forces. When selecting an appropriate data source to meet these information needs, prime sponsors can choose from four major

Table 2-3: Criteria for Selecting Data Sources for Local Outcomes Evaluation

I. Scope of Data Elements Available

Data sources should be sufficient in scope to meet the follow-up information needs of prime sponsors.

II. Quality of Data

Data sources should be thoroughly reviewed for their accuracy, completeness, and internal consistency.

III. Representativeness

Data must be available for all participant groups selected for the local follow-up data base.

IV. Timeliness of Information Retrieval

Data must be available in a timely enough fashion to meet prime sponsor annual planning needs.

V. Cost

Data sources should be reviewed and compared to determine that which is least costly, given the information needs identified by the prime sponsor.

Table 2-4: Alternative Sources of Data for Local Follow-Up Systems

Type of Data	Sources
I. Post-Program Economic Data	o Social Security Administration Earnings Data o State Unemployment Wage Records o Employer Follow-Up Surveys o Participant Follow-Up Surveys
II. Post-Program Non-Economic Data, Including Participants' Views of Programs	o Participant Follow-Up Surveys
III. Demographic and Socio-Economic Information	o Prime Sponsor MIS o Participant Follow-Up Surveys
IV. Pre-Program Labor Market Data	o Prime Sponsor MIS o Participant Follow-Up Surveys o Social Security Administration Earnings Data o State Unemployment Wage Records
V. Program Activity Data	o Prime Sponsor MIS o Prime Sponsor CTS o Participant Follow-Up Surveys
VI. Participant Location/Contact Information	o Prime Sponsor MIS

sources: Social Security earnings data, Unemployment Insurance wage records data, employer surveys, and participant follow-up surveys. The advantages and limitations of each of these data sources are summarized in Table 2-5, and are discussed below.

1. Social Security Earnings Data

The Social Security Administration (SSA) maintains a master file of yearly earnings for all employees nationwide in those jobs covered by Social Security. This file is arranged by Social Security number and contains selected demographic information, such as sex and birthdate, obtained when individuals request Social Security numbers. Currently, this file is updated annually when employers file Copy A of their employer W-2 Wage and Tax Statement with SSA for those employees covered by Social Security.[14]

Social Security earnings data possess many advantages as a source of information on participants' post-program employment and earnings experiences. SSA records are relatively free from any biases due to sample attrition as coverage is nationwide and includes approximately 90 percent of all paid employment. Since SSA files are maintained through employer tax returns, these records are also complete and accurate for all covered employees. Additionally, Social Security records are both longitudinal, giving those prime sponsors interested in performing long-term evaluations the opportunity to readily do so, and relatively inexpensive, with the only costs involved being those of data processing and analysis.

This source of data does, however, have several limitations. First, the measures of economic outcomes available from the data are limited to annual earnings, with no information on wage rates, weeks worked, or other aspects of post-program performance.[15] Similarly, information is not available on any non-economic measures of performance. Second, Social Security data are currently subject to at least a one and a half year delay in availability. For example, information on terminees' 1980 earnings would not become available in the file until mid-1982. Third, about ten percent of all employees are not covered by Social Security, including federal and many state and local government employees, as well as employees of some non-profit organizations. For covered employees, only earnings up to the maximum tax-

Table 2-5: Strengths and Limitations of Alternative Data Sources for a Local Follow-Up Data Base

Major Sources of Data	Advantages	Limitations
Sources of Post-Program Data		
I. Social Security Earnings Data	o Available for most employees nationwide o Accurate o Complete o Longitudinal o Relatively inexpensive	o Measures of economic outcomes limited to annual earnings o Data not available on non-economic outcomes o At least 1½ year time lag in availability from year of reported earnings o Ten percent of employees not covered o Repeated study procedures not possible o Data not available on participants not employed
II. Unemployment Insurance Wage Records Data (State Employment Security Agency)	o Earnings recorded quarterly o Only three month lag in availability from time of reported earnings o Accurate o Longitudinal o Relatively inexpensive	o Measures of economic outcomes limited to earnings o Data not available on non-economic outcomes o 12 states do not maintain complete files of U.I. data o Small firms and self-employed not covered o Data not available on employees working out of state o Data not available on participants not employed
III. Employer Follow-Up Surveys	o Relatively easy to contact former participants o Relatively high response rate possible o Accurate job and wage information o Can be used to supplement other data sources	o Data available on job-placed terminees only o Data limited to first post-CETA job o Difficult to identify appropriate respondent within establishment o Data not available on non-economic outcomes

Table 2-5 (Cont.)

Major Sources of Data	Advantages	Limitations
IV. Participant Follow-Up	o Relatively short time lag o Wide range of data potentially available o Flexible and subject to change o Can elicit participant opinions and suggestions about programs o Can obtain information for all types of terminees o Can be used to verify other data sources	o Relatively higher cost per participant contact o Possible non-response biases o Problems may be encountered in locating and contacting participants
Sources of Participant and Program Characteristics		
I. Prime Sponsor MIS	o Readily available o Many data elements required by federal law o Current o Only readily available data source for some information	o Not always complete o Full participant contact information not required by law o Data in MIS not always consistent with local follow-up information needs
II. Prime Sponsor CTS	o Readily available o Current o Concise picture of program activities	o Detailed information on participants' experiences not available

able for Social Security are recorded in the file.[16] The fourth limitation is that no information is available for terminees who have not worked since leaving CETA, or who have worked so little that their earnings are not recorded.[17] As a result, follow-up findings obtained by using SSA data could be biased toward those participants with post-program earnings.

A final concern is the way in which prime sponsors can access the data. Since SSA records cannot be released to the public, the Social Security Administration must perform all statistical analyses. The SSA provides a service which matches the earnings data to identifying participant characteristics, and then performs requested statistical analyses. This procedure is generally a less expensive means of acquiring follow-up data than survey techniques, but it substantially restricts the range of analyses which can be performed.

Prime sponsors which want more information about using Social Security earnings data should contact the Office of Research and Statistics in the U.S. Social Security Administration.

2. Unemployment Insurance Wage Data

Most states, through their State Employment Security Agencies (SESA), keep files of quarterly and yearly earnings for employees covered by Unemployment Insurance (U.I.). Like data available from the Social Security Administration, the U.I. wage records represent one potential institutional source of follow-up data.

U.I. wage data have advantages similar to those of Social Security earnings data. Information in U.I. wage records is complete, accurate, and longitudinal for those U.I. covered employees who continue working in the state. In contrast, however, U.I. wage data are reported quarterly, with earnings information generally available only three months after the end of the quarter, a much shorter time-lag than that of SSA data. This series of quarterly earnings is a major feature of U.I. data in that it presents a clearer picture of an employee's labor market experiences than the yearly earnings available from Social Security data.

U.I. data also have certain important limitations. Like Social Security earnings data, U.I. wage data contain only earnings information and are not useful for examining other aspects of post-program performance. Additionally, U.I. wage data are not fully representative. Many employees of small firms, and those who are self-employed are not covered by unemployment insurance. Additionally, data are not available for employees working outside of the state, or for terminees who have not worked since they left CETA. A final disadvantage of U.I. wage data is that a dozen states, including some major industrial states, such as New York and Ohio, do not routinely record quarterly wage data for all covered employees in a master file.[18] Rather, these states acquire wage data for determining benefit rights on a request basis after the worker files a claim.

Actual data elements in a state's U.I. wage files vary across states, as will procedures to be followed to access the data. Prime sponsors interested in using U.I. wage data for outcomes evaluation should contact their State Employment Security Agency (SESA).

3. Employer Follow-Up Surveys

In addition to the institutional data sources, outcomes information can also be obtained through the use of employer surveys. These surveys have several distinct advantages. Employers are generally easy to locate and contact, and most will take the time to answer the survey questions, resulting in a relatively high response rate. Also, employers can be relied upon to provide accurate job descriptions, wage rates, and time worked by their employees.

Despite these advantages, however, employer surveys are quite limited in scope. Since the name of the first post-CETA employer is generally recorded only for participants who are job placed, it is not possible to obtain follow-up information on non-placement terminees. Additionally, for those who were job placed, only the first post-CETA employer is listed, limiting follow-up data to that job. Only when placements remain on their initial jobs for the entire follow-up period can participants' entire post-program employment and earnings experiences be recorded.

4. Participant Follow-Up Surveys

Participant follow-up surveys represent the most viable approach for collecting outcomes data available to prime sponsors. Most importantly, direct participant contacts afford the opportunity to collect the widest range of available information when compared to any of the three data sources already discussed.

Several types of data can be collected through participant surveys, including those related to the post-program employment and earnings experience of terminees, information about non-economic program outcomes, such as school enrollment and military status, and respondents' views and suggestions about the programs in which they participated. In addition, participant follow-up surveys can be structured to provide timely information consistent with prime sponsor annual planning needs, and can be used to obtain information on all types of terminees, unlike SSA data, U.I. data, or employer surveys.

At the same time, problems do exist with relying on participant follow-up surveys as a source of outcomes data. First, there are various issues involved in setting up and operating a survey, some of which will be discussed in Chapter Three. A major concern relates to locating and contacting terminees. Participants may have moved without leaving a forwarding address, may keep irregular hours which make them difficult to reach, or may simply choose not to participate in the survey. This difficulty in locating and contacting terminees may introduce bias into the follow-up findings as the results may be based on disproportionately large and small shares of particular population subgroups. Another limitation of participant surveys is related to the cost of data collection. Operating participant surveys tends to cost more than using employer surveys or Social Security or Unemployment Insurance earnings data.

Despite these limitations, however, the data potentially available from participant surveys represent the most complete information on participants' post-program employment and earnings experiences, their views of the programs in which they participated, and non-economic aspects of performance.

In summary, selected economic outcomes measures can be obtained through several sources, including SSA and U.I. earnings files, employer follow-up surveys, and participant follow-up surveys. However, the first three of the sources provide information only on participants who were employed after they left the CETA program; and even in these cases, problems of data coverage still exist. For prime sponsors to acquire adequate information on economic and non-economic outcomes, as well as terminees' perceptions of all the programs in which they participated, participant follow-up surveys are the most viable alternative.

B. Sources of Demographic and Socio-Economic Participant Characteristics, Pre-Program Labor Market Data, and Program Participation and Contact Information

Without surveying CETA terminees, the information maintained by the prime sponsor in its Management Information System (MIS) and Client Tracking System (CTS) represents the only data source available for participant and program characteristic information. The CTS presents a concise picture of the participant's CETA program-experience while the MIS provides a wider range of more detailed information. These two systems should, for the most part, contain those data necessary to identify the characteristics of participants as well as the programs in which they participated.

Several types of contact information needed for locating and contacting terminees should also be available from the prime sponsor MIS. All MIS should contain participants' full names and addresses. Many systems also contain participants' phone numbers and even "emergency" phone numbers of family members or friends. It should be noted that prime sponsor MIS are not required to record participants' phone numbers although they are critical pieces of contact information. Other types of MIS information useful for locating and contacting former participants include the names and addresses of employers for those job placed, and schools or training programs in which the participant may have enrolled upon termination from the CETA program.

Although prime sponsor MIS and CTS are a primary source of information on participants' program and pre-program experiences, they have limitations which may affect their potential use. Management information and client tracking systems exist to provide the data needed to fulfill federal reporting requirements. Such information is often insufficient for many decisions which must be made at the local level. For example, federal regulations do not require that prime sponsors record the industries in which on-the-job training takes place. However, for local planning efforts, this information can be valuable for determining whether the success or failure of an OJT program is attributable, in part, to the industry in which the participants are working. In addition, such critical data items as the respondent's telephone number and alternate emergency numbers of family or friends are also not required. Prime sponsors planning to use participant surveys to gather post-program information should aim to have these data included in their MIS as an important part of their local follow-up systems.

FOOTNOTES TO CHAPTER TWO

1. The composite nature of earned income stems from the fact that it is based upon the product of an individual's total weeks worked, average hours worked per week, and average hourly wage rates. As a measure of post-program performance, it therefore reflects the total labor force experience of former participants, as well as several objectives which a local delivery system may be designed to achieve.

2. For a thorough review of issues and methods related to analyzing the sources of income gains see:

   Sum, Andrew, Katherine Mazzeo, Francis McLaughlin, and Jeffrey Zornitsky, Evaluating the Performance of Employment and Training Programs at the Local Level, Employment and Training Administration, U.S. D.O.L., Boston, Massachusetts, 1978, Volume Two, pp. 357-371.

3. While the conceptual reasoning behind this point may be clear, the usefulness of the approach will be critically dependent upon the types of statistical techniques selected for analysis purposes. For a thorough review of the application of alternative statistical techniques see:

   Sum, Andrew, et al., op. cit., Volume Two, pp. 221-317.

4. Thus far, a determination of those gross performance measures that reliably predict long-term program effectiveness has not been satisfactorily resolved. Currently, only three published empirical research studies on this subject have been completed, each with somewhat differing results. See:

   Borus, Michael, "Indicators of CETA Performance", Industrial and Labor Relations Review, Volume 32, No. 1, October, 1978, pp. 3-14.

   Gay, Robert, Validating Performance Indicators for Employment and Training Programs, U.S. Department of Labor, Employment and Training Administration, Office of Research and Development, Washington, D.C., April, 1978.

   Geraci, Vincent, and Christopher King, Employment and Training (CETA) Program Performance: Long-Term Earnings Effects and Short-Term Indicators, University of Texas at Austin, Department of Economics, December, 1980.

5. A control group is defined as a group of individuals who, when compared to those receiving services, are different only in that they did not receive program services. True control groups are established by randomly assigning individuals to receive or not receive program services. When random assignment is not possible, attempts can be made to match individuals according to those characteristics which likely influence program performance. This latter procedure results in a comparison group which, in contrast to a control group, represents an incomplete accounting of differences between individuals. For a good discussion of selecting control and comparison groups see:

   Campbell, Donald, "Reforms as Experiments", American Psychologist, Vol. 24, No. 4, 1969, pp. 409-429.

   Issac, Stephen, and William Michael, Handbook in Research and Evaluation, Edits Publishers, San Diego, California, 1971.

Hardin, Einar, "On the Choice of Control Groups", in Borus, Michael (Ed.), Evaluating the Impact of Manpower Programs, D.C. Heath and Company, Lexington, Massachusetts, 1972, pp. 41-58.

Sax, Gilbert, Foundations and Educational Research, Prentice Hall, Englewood Cliffs, New Jersey, 1979.

6. When using a comparison group, the incomplete accounting of differences between individuals makes it necessary to use statistical controls in order to accurately identify the independent contribution of a program to a given outcomes measure. In most cases, evaluators have utilized either multiple regression analysis or analysis of variance techniques to accomplish this. For a review of selected studies that have used and/or discussed the relative merits of alternative comparison groups see:

Borus, Michael, John Brennan and Sidney Rosen, "A Benefit-Cost Analysis of the Neighborhood Youth Corps: The Out-of-School Program in Indiana", Journal of Human Resources, Vol. 5, No. 2, Spring 1970, pp. 139-159. (Uses eligible applicants who did not participate in the program).

Cooley, Thomas, Timothy McGuire and Edward Prescott, The Impact of Manpower Training Programs on Earning: An Econometric Analysis, prepared for Office of Policy, Evaluation and Research, U.S. Department of Labor, Washington, D.C., 1975. (Uses both eligible applicants who did not participate in the program and a matched sample from Social Security files).

Garey, Robert B., The Earnings Effects of CETA Title I in South Carolina: An Evaluation Using Social Security Data, The University of South Carolina, Bureau of Government Research and Service, Columbia, South Carolina, 1978. (Uses a matched sample from Social Security files).

Gibbard, Harold, and Gerald Somers, "Government Retraining of the Unemployed in West Virginia", in Somers, Gerald (Ed.), Retraining the Unemployed, University of Wisconsin Press, Madison, Wisconsin, 1969, pp. 17-24. (Uses a matched sample of persons having active or inactive applications on file with the State Employment Service).

Hardin, Einar, and Michael Borus, The Economic Benefits and Costs of Retraining, D.C. Heath and Company, Lexington, Massachusetts, 1971. (Uses non-trainees who applied and were eligible for the program but did not participate).

Main, Earl, "Nationwide Evaluation of M.D.T.A. Institutional Job Training", Journal of Human Resources, Vol. 3, No. 2, Spring 1978, pp. 159-170. (Uses friends and relatives of trainees who were unemployed at about the same time the participants entered training).

Westat, Inc., Continuous Longitudinal Manpower Survey: The Impact of CETA on Participants Earnings, Working Papers One and Two, prepared for the Office of Program Evaluation, Employment and Training Administration, U.S. Department of Labor, Washington, D.C., 1980. (Uses matched sample from Social Security files and Current Population Survey).

7. For a review of several studies containing before and after comparisons see:

Perry, Charles R., Bernard E. Anderson, Richard L. Rowan, and Herbert R. Northrup, The Impact of Government Manpower Programs: In General, and On Minorities and Women, Industrial Research Unit, The Wharton School, University of Pennsylvania, 1975.

Additionally, a critical review of before and after comparisons can be found in:

Sax, Gilbert, op. cit.

8. One way to possibly address these problems is to employ a time-series model. The key advantage of this approach is that it seeks to extend the pre-program period for a sufficient duration to account for the problems of maturation and regression toward the mean. It does, however, still suffer from the problem of history. Moreover, the use of extended pre-program observations will not be fully possible for individuals who either are new entrants to the labor market or have not participated in the labor force for an extended period of time. In the first case, one could delete these individuals from estimates of program effects. While a similar approach can be taken for the re-entrants, it may be desirable to attempt to go farther back in time to collect their work history data.

9. See for instance:

Geraci, Vincent, op. cit.

10. Pre-CETA labor market conditions can potentially influence the measurement of post-program performance in one or a combination of two ways. First, to the extent that local labor markets become loose, individuals equipped with marketable skills and experience may find themselves unable to secure or maintain employment. In this case, the deterioration in their employment and income status would tend to be more temporary in nature than a reflection of their permanent status in the labor market. Thus, measures of program effectiveness could potentially be biased by the problem of "regression toward the mean" since these individuals could be expected to improve their labor market status in the absence of program participation. Secondly, changes in local labor market conditions between the pre- and post-program period could either enhance or reduce an individual's labor market status in the absence of the program. In this case, the use of enrollment dates would serve to establish a consistent basis for judging the effectiveness of local programs.

11. While it is difficult to objectively classify prime sponsors by size, the key factor that should be used to determine the appropriateness of sampling is whether or not a sample can be drawn to generate statistically reliable results. For a thorough treatment of sampling techniques and procedures see:

Cochran, William G., Sampling Techniques, John Wiley and Sons, Inc., New York, New York, 1963.

12. See: Geraci, Vincent, op. cit.

13. Even a six month follow-up period, however, cannot be fully relied upon to generate information on all programs operating in the same year during which the follow-up survey is taking place. Assuming that follow-up begins in October as do new fiscal year programs, the first follow-up of October terminees could not begin until April, which is the beginning of the annual planning cycle. Thus, even with a relatively short follow-up period such as six months, prime sponsors will have to rely upon a mix of current as well as previous fiscal year data.

14. A copy of the W-2 wage and tax statement is contained in Appendix A.

15. Prior to 1978, the Social Security Administration maintained a file of earnings by quarter as well as yearly earnings up to a maximum taxable level for all employees. In 1978, the current system of updating the file once a year through employer W-2 wage and tax statements was initiated.

16. In early 1981, the maximum taxable income was increased to $29,700, which is likely sufficient to cover most CETA participants' post-program earnings.

17. Prior to 1978, individuals were required to earn a certain amount in each quarter to be credited for the quarter. Currently, an individual is given credit for one quarter for each $300 he/she earns. If an individual earns less than $300 in a year, no annual earnings will be recorded for that year.

18. As of the end of 1980, those states which do not maintain a complete file of U.I. wage data are: Hawaii, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Ohio, Rhode Island, Utah, Vermont and Wisconsin.

CHAPTER THREE

IMPLEMENTING AND OPERATING LOCAL FOLLOW-UP SYSTEMS

IMPLEMENTING AND OPERATING LOCAL FOLLOW-UP SYSTEMS

I. INTRODUCTION

Prior to implementing a locally-based follow-up system, prime sponsors must make a series of decisions regarding the organizational and operational approach they will use. Since prime sponsors can exercise considerable latitude in making these decisions, it is important that all options are explored fully and that both in-house and external resources are considered.

This chapter is designed to help prime sponsors in the following major aspects of their local follow-up systems:

- The selection of a participant contact method;
- The development of a follow-up questionnaire;
- The choice of an organizational approach for conducting follow-up surveys;
- The use of participant contact and interview techniques; and
- The use of quality control and data processing procedures.

Each of these topics is addressed separately below.

II. SELECTING A PARTICIPANT CONTACT METHOD

There are three primary participant contact methods which prime sponsors can use to administer their follow-up questionnaires: 1) telephone surveys; 2) personal visit interviews; and 3) mail surveys. As shown in Table 3-1, each of these methods possesses several strengths and limitations that impact upon their response rates, data quality, and costs. When selecting a participant contact method, prime sponsors should consider these three factors since they will have a direct bearing on the usefulness of follow-up information for decision-making. This section will provide a brief discussion of these factors as well as the results from an empirical study designed to determine the most effective and cost-efficient survey method for contacting CETA terminees.

Table 3-1: Advantages and Disadvantages of Alternative Survey Methods

Method	Advantages	Disadvantages
Telephone:	o Opportunity to directly question the participant o Offers opportunity to ask respondent to clarify answers o Relatively easy to manage and supervise; provides opportunity to control interviewer bias o No travel required	o Length of interview must be limited o No ability to obtain visual clues from respondents o Visual materials cannot be used for questions o Limited ability to locate participant; not able to go to participant's residence
Personal Visit:	o Opportunity to directly question the participant o Offers opportunity to clarify answers o Interviewer is able to obtain visual clues from respondent o Visual materials can be used for questions o Provides maximum opportunity to influence response rates; Interviewer can travel to search for participant	o Management of survey operations is difficult o Quality control and verifications are more complicated o Time-consuming o Travel is required
Mail Surveys:	o Wide geographic area can be covered economically o Greater privacy since questionnaire is completed without an interviewer o Questionnaire can be completed at the leisure of the respondent o For those respondents who often may not be at home, mail contact may be more successful	o Limited ability to influence response rates o Limited ability to control data quality o No opportunity to ask respondents to clarify answers o Questionnaire may be ignored by those who have reading problems

The response rate of a contact method is a measure of the number of terminees who complete a questionnaire relative to the total number of terminees the prime sponsor attempted to survey. Generally, one would expect both telephone and personal visit surveys to yield higher response rates than mail surveys. Since mail surveys rely solely on the respondent to complete and return the questionnaire, interviewers do not have the opportunity to contact terminees and directly solicit their participation in the survey.

The overall quality of the data, including how completely and accurately the follow-up information has been recorded on the questionnaires, is also likely to be higher for telephone and personal visit surveys. For both of these methods, interviewers who are familiar with the survey instrument are relied upon to ask all questions, record responses and check for accuracy and completeness. In contrast, the respondent who completes a mail questionnaire at home is not familiar with it, and, therefore, may not understand what is being asked, or where to record the information.

Although both the quality of the data and the response rate are expected to be lower for mail than for telephone or personal visit surveys, mail surveys are generally thought to be a useful participant contact method because of their lower cost. Because all questionnaires are mailed to and completed by respondents themselves, there are no costs associated with either administering the questionnaire or traveling to and from the respondent's home.

In order to help prime sponsors make a selection from among these alternatives, the Employment and Training Administration, U.S. Department of Labor, recently supported a research project to determine the most reliable and cost effective method of gathering post-program data using a participant questionnaire. The purpose of the study was to compare and contrast each of the three survey techniques with respect to their overall response rates, the consistency and completeness of the data collected, and the associated cost.

A. Findings From a Study of the Reliability and Cost-Effectiveness of Three Survey Methods

The study included 784 former CETA participants who had terminated from five prime sponsors located in two ETA regions. All participants were economically disadvantaged and terminated from programs funded under CETA Title IIBC (75 percent) and Title IID (25 percent). These participants were randomly assigned to one of three groups corresponding to the three survey techniques. This assignment determined whether the ensuing six month post-program follow-up interview attempt would be conducted in person, over the telephone, or through the mail. Guidelines were provided to project interviewers to insure that location and contact procedures were uniformly pursued across the three alternative approaches. The results are briefly discussed below, while a detailed description of both the project and its findings is contained in Appendix B.

A comparison of the rates of response (actual survey completion) associated with the three survey methodologies revealed that the highest response rate was achieved by the telephone survey (45 percent), followed closely by personal visit interviews (40 percent). The mail survey yielded only a 19 percent rate of response after a two stage mailing.[1] Analysis of the telephone and personal survey methods indicated that, although there was a slight difference in the response rate, the actual rate of contact (including those who were contacted but did not respond to the interview) was identical (48 percent). This indicates that, compared to the telephone survey sample, a large group of those approached for personal visit interviews refused to participate. Some of the refusals came during the initial phone contact as an attempt was made to schedule a personal interview. It appears that respondents prefer the anonymity of a telephone or mail survey to the face-to-face contact of personal interviews. Also, many terminees failed to meet a pre-scheduled personal interview appointment.[2] This underscores the importance of taking advantage of the initial contact success by attempting to conduct the interview immediately.

Another major focus of the research was to assess the "quality" of data collected with respect to its completeness and internal consistency, including the appropriate use of skip patterns and instructions. Similar to the response rate findings, the telephone and personal visit interview methods generated high levels of data quality and consistency. In contrast, the information collected through mail surveys yielded less complete and less consistent data.[3] These results are consistent with expectations since telephone and personal visit interviewers received extensive training in the use of the survey instrument, whereas mail survey respondents were viewing the questionnaire for the first time.

The final major issue under examination was relative cost. The cost of a completed interview was calculated to include the time spent locating terminees, the actual time spent administering interviews, and the time spent checking and coding completed questionnaires.[4] The least expensive approach was the telephone survey, with an average cost of $2.13 per completed interview. The personal visit method was considerably more expensive, with an average cost of $16.27 per completed interview, clearly reflecting the considerable time and travel costs associated with this approach. The average cost of an interview completed through a mail survey was found to be $6.59. This mail survey cost may seem high since there are no associated interview costs; however, the two mailings coupled with a low response rate resulted in a comparatively costly operation.

These findings demonstrate that the telephone survey technique most favorably balances the major considerations of response rates, data quality and overall costs. Although personal interviews produced competitive response rates and high quality data, the associated high costs keep them from being a practical option for prime sponsor use. Similarly, mail surveys do not emerge as a viable local option because they tend to generate low response rates and comparatively low quality data. Therefore, prime sponsors should primarily consider telephone surveys when selecting a participant contact method.

III. DEVELOPING A FOLLOW-UP QUESTIONNAIRE

The follow-up questionnaire is the primary source of information on the post-program labor market activities of CETA terminees. Because this information serves as the basis for evaluative judgements, the survey instrument must be constructed to maximize the accuracy and utility of the follow-up data base. This section on questionnaire development covers the following three areas:

- The development and wording of questions;
- The advantages and limitations of several methods of collecting information on the participants' post-program activities; and
- Issues in constructing the questionnaire.

On occasion, an issue in questionnaire development is critically linked to the choice of a particular survey method. When considerations are notably different among telephone, personal visit and mail survey instruments, the variations will be discussed.

A. Developing Questions

Once the list of desired post-program data is determined, questions must be developed to elicit exactly this information from CETA terminees. Questions must be precisely focused and phrased so that the average respondent can easily understani what is being asked. Careful consideration should also be given to the length of the questions. To keep the interview as short as possible, questions should be designed to cover all the required information without undue overlap or repetition. This section discusses first the basic types of questions which can be used in developing a follow-up questionnaire, and then focuses on issues in the wording of questions.

1. Types of Questions

There are three broad categories of question and answer formats: fixed response, open-ended, and sorting or "skip" questions.

Fixed response questions are those for which a series of possible answers is listed below the question. By having the most common responses written below the question, the interviewer can record the respondents' answers very quickly and then proceed with the rest of the interview. This approach, however, is only possible when the prime sponsor knows what types of responses are likely.

When administering the interview, the interviewer either reads the choices to the respondent, or matches the respondent's answer with one of the listed responses.

Example 1

"How did you find out about this job?"

1 = CETA Agency	5 = Friends or Relatives
2 = Employment Office/Job Service	6 = Answered Newspaper Ad
3 = Private Employment Agency	7 = Other _____
4 = Contacted Employer Directly	

In this example, responses are not read aloud as they may influence the respondent's choice of an answer. There is a blank line next to "other" to be used for listing responses other than those already identified. It is necessary to accurately record these "other" responses, since they represent an important additional source of information and may be listed as additional choices in the future.

Another type of fixed response question seeks to direct and focus the response by providing the only possible choices to the respondent.

Example 2

"All things considered, how would you rate the CETA program?"

1 = Excellent 2 = Good 3 = Fair 4 = Poor

It should be noted that on a questionnaire used in a mail survey, there is less of a difference between types of fixed response questions because the respondent always reads the responses. On questions for which there may be more answers than those listed, an "other _____" choice may be included with instructions to "please specify".

Open-ended questions are those for which no predetermined responses are listed on the questionnaire, or read aloud to the respondent. There are two varieties of open-ended questions. The first is the open-ended question for which the respondent provides a numeric amount.

Example 3

"What was your starting hourly wage rate?" _____

or

"How many hours do you usually work per week?" _____

In both of these cases, the answer itself is a number and is a readily usable data element either as recorded, or after being grouped into discrete categories.

The second type of open-ended question involves a non-numeric response. The interviewer asks the respondent the question and then records the entire reply verbatim, as in Example 4.

Example 4

"How would you improve the CETA program?"

_____

_____

This type of question is more time-consuming than fixed response, or numeric open-ended questions, due to the potentially extensive nature of the responses. However, it provides respondents with the greatest degree of latitude when responding to a particular question.

Certain survey questions can be developed as either a fixed response or an open-ended question as shown in Example 5.

Example 5

A) "How many hours do you usually work per week?" _____

B) "How many hours do you usually work per week?" _____

1 = 0-15	4 = 36-45
2 = 16-25	5 = 46-55
3 = 26-35	6 = 56+

Determination of the most appropriate format depends both upon the time constraints of the interview as well as the nature of the analysis to be performed with the data. In the above example, it is probably faster to record the number of hours instead of scanning the alternatives in Option B for the appropriate response. Developing a questionnaire also requires foresight as to future uses of the data. Usually, questions which are not categorized on the survey instrument, (Option A rather than Option B above), allow the analyst more latitude and flexibility in aggregating and disaggregating the data for various analytical purposes.[5]

A third type of question is the sorting or "skip" question. These questions are generally used to obtain one small piece of information to direct the interviewer to the next appropriate group of questions.

Example 6

"Are you currently working?" _____

1 = Yes 2 = No

This question sorts out respondents who are working from those who are not. The interviewer can then, for instance, proceed to questions about the current job for respondents who answer "yes" and to questions about job search activities for those who answer "no". Sorting questions used on a mail questionnaire indicate to respondents the next set of applicable questions or instructions. Sorting questions and their uses for the "skip pattern" of the questionnaire are discussed in greater detail in the third part of this section, Constructing the Questionnaire.

2. Wording of Questions and Responses

There are several considerations to keep in mind when writing the questions for a participant follow-up questionnaire. Questions should be simple, clear, and easy to understand, and should avoid the use of technical language or other jargon. They should have a defined scope and should not seem vague to the respondent. Questions should also be objective and not make the respondent feel that there is a preferred answer.

Some examples illustrating a few of these major concerns are shown below.

Example 7: No technical language or jargon.

A) "In the ____ weeks since you left the CETA program, how many weeks were you unemployed?"

B) "In the ____ weeks since you left the CETA program, how many weeks were you not working?"

In Question A, the term "unemployed" is used. Most respondents will probably treat the question as asking them when they were "not working", but some respondents may understand it to mean "not working and looking for work." Consequently, respondents may answer the question from two perspectives. Question B eliminates this possibility.

Example 8: Defined scope, not vague.

A) "Why did you enroll in the CETA program?"

B) "What was your main reason for enrolling in the CETA program?"

Essentially, Questions A and B ask for the same information. However, Question B narrows the scope of the question to one primary reason which focuses the respondent's recollection and is easier for the interviewer to record than several contributing reasons.

Example 9: Simply phrased.

A) "What were your starting and final hourly wage rates for this job?"

B) "What was your starting hourly wage rate for this job?"
"What was your final hourly wage rate?"

Questions which are short and straightforward are easier to follow than longer ones. In some cases, as in Example 9, this may mean asking two simple questions instead of one more complicated one.

Example 10: Objective.

A) "You haven't been looking for work every week since you left your last job, have you?"

B) "Have you looked for work every week since you left your last job?"

Questions should be phrased as objectively as possible. While question A has an obvious slant, there may be instances where the slant is more subtle.

Concerns about question wording may vary depending on the survey method. Questions need to be very short and very simple when read over the telephone. In a personal interview, questions can be longer and more detailed as the respondent can see the interviewer's facial expression and make eye contact during the interview. On a mail survey, the language used for questions must be extremely basic, although questions may need to be longer in order to contain sufficient explanation or instructions to allow for a response in the absence of any assistance from an interviewer.

Other concerns in structuring a mail questionnaire are question format and the wording of response choices. In any survey instrument, questions should be easy to read and should be clearly distinguished from the other text. This is particularly crucial in the mail questionnaire. Questions must be clearly designated and techniques, such as capitalization or underlining of key points, used when appropriate and possible, as in Example 11.

Example 11

A) "What was the best thing about the CETA program?"

B) "What was the BEST thing about the CETA program?"

Wording of response choices in fixed response questions is primarily a concern in questionnaires sent through the mail. Whereas response choices in telephone and personal visit questionnaires can include technical terms or abbreviations, mail questionnaire response choices must be as clear and easy to understand as the questions themselves. For example, one response under the question "How did you find out about the first job you held after leaving the CETA program?", might be the listings maintained by the local State Employment Security Agency, often referred to as the "employment service" or "job service" by professionals in the employment and training system. However, among CETA program participants and the public generally, this office may be referred to as the "unemployment office." On a mail questionnaire, it is advisable to use both alternatives.

Example 12

"How did you find out about the first job you held after leaving the CETA program?"

Telephone:	1 = Employment Service/Job Service
Mail:	1 = State Employment Security Agency (Unemployment Office)

B. Tracking Participants' Post-Program Activities

The issues of wording and format are general considerations in questionnaire design, but a more specific concern to prime sponsors involves the most efficient and effective method of tracking and recording post-program labor market and related activities. This section will discuss several approaches to documenting how a respondent's time was allocated over the post-program period. A summary of three techniques for tracking activities over the follow-up period is presented in Table 3-2.

To obtain data describing terminees' activities continuously for the entire follow-up period, it is necessary to determine the total number of weeks in which the individual was engaged in each of the following:

- Working,
- Attending School,
- Attending a Training Program,
- Serving in the Armed Forces, and
- Not working, attending school or training, or serving in the Armed Forces.

These five categories do not distinguish between the weeks a participant was unemployed or was out of the labor force.[6] Generally, survey respondents have a difficult time distinguishing between being unemployed and being out of the labor force.[7] As a result, it may be more practical to simply identify the weeks the respondent was not working.

The first method for tracking post-program activities is the fastest method; the interviewer asks the respondent to estimate the number of weeks spent in each of the activities noted above. This approach requires a minimal number of questions and is therefore probably the simplest and least costly data collection method. The key drawback is that respondents are generally not able to give consistent estimates of the number of weeks they spent in different activities.[8]

Table 3-2: Techniques for Tracking Post-Program Activities

	Technique	Advantages	Limitations
1)	Asking respondent to estimate number of weeks spent in different activities over the entire follow-up period	o Simple o Requires few questions o Takes the least amount of time	o Difficult for respondents to estimate weeks spent in activities over the entire follow-up period o Respondent's estimates are often inaccurate
2)	Asking respondent to estimate number of weeks spent on each job held during the follow-up period and weeks not working between jobs	o Easier for respondent to estimate weeks on each job than total weeks working o Gathers job related information simply for those respondents with one or two jobs o Leads to more accurate information than the first technique	o Very confusing for individuals with more than two jobs o Still requires respondent to estimate weeks on the job
3)	Continuous Work History Table	o Provides organizational tool for sequentially tracking and recording all post-program activities from date of interview backwards to date of termination o Relies on estimates of dates rather than number of weeks	o Requires more time and training for interviewers to learn to use the table

A second approach is to collect information about each individual job held in the follow-up period. Attention is focused upon the length of employment, the details of each job, and time spent between all jobs. Because it asks the respondent for information job by job, this method may result in more accurate data than the first method. Respondents may find it easier to estimate the number of weeks on one job than the total weeks on all jobs in the follow-up period.

There are two disadvantages of this approach. First, for individuals who have held more than two jobs since leaving CETA, the interview may become confused as they attempt to sort out the number of weeks spent on each job. Second, this approach, like the one mentioned above, requires that respondents estimate the number of weeks spent working or not working which has proved difficult in the past.

A third technique for tracking participants' post-program activities is to use a Continuous Work History Table. This table, currently being utilized in the Continuous Longitudinal Manpower Survey, was designed to address some of the shortcomings of the approaches already presented by providing an organized format for cateloging post-program activities. An example of this format is provided in Figure 3-1.

To avoid confusion over exactly when the post-program period began (the date of program completion and the official date of termination may not be the same), the interviewer begins by asking respondents about their current activity. This is followed by a brief series of questions which gathers summary information about the activity. If the respondent is working, attending school or a training program, the interviewer asks for name of the company or school, and where it is located. Those who are working are also asked to identify their job title. Finally, respondents (including those who were not working or attending a school or training program), are asked when they started the activity, when it ended, and what they did just before that particular activity. The series of questions is then repeated; this time directed at the activity immediately before the one just described. In this manner, the interviewer can trace all the respondent's post-program activities from the time

Figure 3-1: Continuous Work History Table

BEFORE STARTING: (Circle the date the terminee ended the CETA program and today's date on the calendar at left. Work backwards on the calendar covering the entire time period as you fill out the chart below)

SECTION II: SUMMARY POST-PROGRAM EXPERIENCE

"Now I would like to find out what you have been doing since ending your CETA program, that is, between (date ended last program) _____ and now. I would like to start by asking you about what you are doing now, and then ask you a series of questions about your activities during the past few months.

6A. "Which of the following activities are you doing currently?" (Read 5 Activities to Respondent)

Activity Code		Activities	
1	=	Working	GO TO QUESTION 7 (In Chart)
2	=	Attending School	
3	=	Attending a Training Program	
4	=	Serving in the Armed Forces	GO TO QUESTION 11 (In Chart)
5	=	None of These	

6B. "Before that, which of the following activities were you doing?" (Read 5 Activities to Respondent)

Activity Code		Activities	
1	=	Working	GO TO QUESTION 7 (In Chart)
2	=	Attending School	
3	=	Attending A Training Program	
4	=	Serving in the Armed Forces	GO TO QUESTION 11 (In Chart)
5	=	None of These	

(REPEAT QUESTIONS 6B THROUGH 12, AS APPLICABLE, UNTIL THE ENTIRE POST-PROGRAM PERIOD IS ACCOUNTED FOR)

Activity Code	7. What is the Company/ School name?	8. Where is it located?	(If Working) 9. What does this company do?	(If Working) 10. What is/ was your job title?	11. When did you begin?	12. When did you stop? (GO TO Q. 6B)	# of Weeks
1)						PRESENT	
2)							
3)							
4)							
5)							
6)							
7)							
8)							

13. Are any of these jobs "CETA jobs"?

If Yes: Which ones? (Circle row number)

If: WORKING AT TIME ENDED PROGRAM: GO TO SECTION IV
NOT WORKING AT TIME ENDED PROGRAM: GO TO SECTION III
NO JOB SINCE LEAVING CETA: GO TO SECTION VI

of the interview back to the point of departure from the CETA system.

A key feature of the Continuous Work History Table is that respondents are asked for the dates they began and ended activities rather than the number of weeks they were in the activity. Respondents may not always remember the exact dates, but can usually recall the month, and whether or not it was the beginning or end of the month. By tracing time periods of activities on the calendar attached to the table, the interviewer can readily identify gaps in activities or assist respondents in remembering a date. The table also collects basic information on more activities than employment.

The Continuous Work History Table initially requires more time and training for interviewers to become familiar with it, and may seem more imposing at first than other approaches. However, it can provide the most organized and accurate data on participant post-program activities of any of the three methods.

The Continuous Work History Table is generally considered too complicated for use in a mail survey. Another version of this approach is shown in the mail survey questionnaire in Appendix D, and consists of a page with a full calendar on which respondents can circle the days spent in each type of activity. This calendar can be accompanied by a completed example which can serve as an illustration.

With the use of the Continuous Work History Table, prime sponsors can systematically trace how participants have allocated their time during the post-program period. It will also be necessary to elicit select detailed information on the nature of their activities.[10] One approach is to collect detailed information about each employment and non-employment activity during the follow-up period. While this approach is the most comprehensive, it is also the most complex to administer.

Another approach is to focus data collection strictly on participants' first and last or current post-program labor force activities. While this approach precludes the opportunity to measure the non-economic performance of programs, it does collect data on jobs which were held at significant points during the follow-up period. Information on the first job held immediately after leaving the program gives

some measure of short-term benefits of participation. The current or last job held in the follow-up period provides some indication of benefits gained over a somewhat longer time period.[11]

A third approach is to focus detailed data collection efforts around the first and current or last job, but also include a minimal set of questions regarding any other employment and non-employment experiences. Although this approach is not as simple as the one above, it provides for both a more accurate estimate of post-program earnings and an assessment of the non-economic aspects of program performance. Appendices C and E contain follow-up questionnaires which correspond to the last two alternatives.

C. Constructing the Questionnaire

There are five broad concerns in questionnaire design which will be discussed in this section:

- The grouping of questions into sections;
- The sequencing of sections;
- The writing of the text;
- The coding of responses to questions; and
- General issues in the format and layout of the questionnaire.

1. Sequencing of Questions

Once questions have been written in a clear and concise fashion, they must be arranged so that the interview can proceed smoothly and the respondent can focus on the appropriate areas of concern or interest. The arrangement of the questions is also important in that it may help to stimulate the respondent's memory of a particular time or event.

A first general principle is that questions should be arranged in some logical order. Usually, questionnaires are divided into sections by topic. For instance, the questionnaire in Appendix C is divided into the following sections:

I. Respondent's View of the Program

II. Summary Post-Program Experience

III. For Respondents Who Were Not Working Prior to the First Job After CETA

IV. Information on the First or Only Employer After CETA

V. Information on Current/Last Employer if more than one Employer After CETA

VI. For Respondents Who Are Not Currently Working

Second, a series of questions which covers activities spread over a long period of time can be arranged in chronological or reverse-chronological order. Many people find it easier to remember things in chronological order. However, when the interviewer is asking questions about activities which have occurred over a long period of time, it may more effective to help respondents remember the details of their current activity first, and then work backwards through the rest of the follow-up period. This approach was adopted in the Continuous Work History Table.

Another way of organizing questions is sometimes referred to as "funneling".[12] Typically, this refers to arranging the questionnaire so that more general questions are asked first, followed by questions of increasing specificity. By asking questions in this order, the interviewer can gradually narrow the respondent's focus.

2. Sequencing of Sections

When arranging the sections in a questionnaire, several points must be kept in mind. All questions of a sensitive nature, such as public assistance status, or any questions that the respondent may find particularly difficult to answer, should come later in the questionnaire.[13] Once respondents begin answering some questions with minimal trouble, they are more likely to finish all the questions. It may also be helpful to ask the participants' views and opinions of the program at the beginning of the questionnaire. Thus, the interviewer shows that the respondents' views are important and by doing so many enhance their sense of involvement.

A final point is that sections must be organized so that the interviewer is able to find the applicable sections quickly and without shuffling back and forth through the questionnaire. This is of particular concern on a mail questionnaire which must be organized to allow the respondents to locate the appropriate sections without assistance.

3. Text of the Questionnaire

In addition to questions and responses, a substantial amount of other text is necessary within a survey instrument. This text is of two types: script, which is read by the interviewer to the respondent, (or by the respondent if part of a mail questionnaire); and instructions, which direct the interviewer (or the mail survey respondent), in how to proceed through the survey. Generally, the script provides the interviewer with a standardized means for moving the interview from one set of questions to another. It is very important to standardize the script phrases as variation in individual interviewing techniques can introduce bias into the responses.

Script phrases provide a consistent means for interviewers to introduce themselves and the purpose of the interview, and to stress how "valuable" the respondent's cooperation will be. Script phrases also enable the interviewer to shift the respondent's focus from one topic area to another, as in Example 13.

Example 13

> "Now I would like to ask you a few questions about the first job you held after leaving the CETA program."

Phases such as that in Example 14 can also create a sense of importance for a set of questions.

Example 14

> "This next group of questions is very important. Please think carefully before giving your answers."

In addition, script phrases can help the respondent remember what was discussed previously, which may help to answer the questions in a particular section. The phrase in Example 15 repeats what the respondent said previously and also translates the length of time into a number of weeks.

Example 15

> "You said that between leaving the CETA program and _____ you did not work. I would like to ask you a few questions about that _____ week period."

The other type of text is instructions which are necessary for several reasons. First, instructions should be readily available to interviewers in case they become confused, or are confronted with a particularly unique circumstance. Second, instructions provide information about which sections of the questionnaire are applicable to the respondent, and direct the interviewer to the next section. Instructions are particularly important on a mail questionnaire as they must provide for unassisted completion of the survey instrument.

To insure that instructions can be easily distinguished from the script of a questionnaire, several approaches are available. Written instructions can be put in parentheses, written entirely in uppercase or italics, or can be underlined. Another technique is to use symbols such as stop signs or flags to indicate what to do next. If a prime sponsor has the graphics capability, questionnaire instructions can also be color-coded.

One set of instructions of special concern is the "skip pattern". Usually, not all questions in a survey apply to all respondents. The "skip pattern" instructions indicate which questions are not applicable and should be "skipped". They also direct the interviewer to the next applicable section. Skip pattern instructions should keep the interviewer or respondent moving ahead in the questionnaire, not leafing back through partially completed pages. In addition, skip pattern instructions are needed at the end of each section and after sorting questions such as those

discussed earlier in this section. Such instructions are often written as a "go to" statement. Arrows can also be used to provide a sense of movement or to actually point at the next question as in Example 16.

Example 16

"Are you currently working?"

___ Yes (CONTINUE) ↓ ___ No ⟶ (GO TO Q. 14)

Mail questionnaires need extremely clear skip pattern instructions as the respondent must be able to follow them without becoming lost or frustrated. Instructions on a mail questionnaire may need phrases a bit more specific than "GO TO Q. 14", such as those in Example 17.

Example 17

PLEASE CONTINUE WITH THE NEXT QUESTION.

PLEASE GO TO PAGE 4, QUESTION 16.

On a mail questionnaire, the distinctions between script, instructions, and skip patterns are not as pronounced as they are on questionnaires read by an interviewer, because all are read by the respondent. However, questions and locations for responses must be clearly identified to minimize the chance that respondents will miss a question or put their answers in the wrong place.

4. Coding of Responses

When designing the questionnaire, prime sponsors should keep in mind how they will organize the data for processing purposes. If no computer facilities are available, hand tabulations can be made directly from the completed survey instruments. If the data will be entered into a computer, they must be coded.

There are two primary methods for coding questionnaire responses. The first is to transfer all data on the questionnaire to coding sheets formated to resemble the layout of a computer "punch" card. The data are then entered into the computer

from the coding sheets. This procedure requires that the information from the questionnaire be transferred twice, once to coding sheets, and then to the computer, increasing the potential for misreading and miscoding the data. The alternative is to include the coding format on the questionnaire itself. In this case, data can be entered directly into the computer from the questionnaire, eliminating the need for an intermediate step.[14]

Example 18

		33	34
17. "How did you find about this job?"	17		

01 = CETA Agency
02 = Employment Office/Job Service
03 = Private Employment Agency
04 = Contacted Employer Directly
05 = Friends or Relatives
06 = Answered Newspaper Ad
07 = Other _____

Example 18 is an excerpt from the questionnaire in Appendix C showing one way this can be accomplished. The interviewer can enter the appropriate code number into the boxes at the right margin. The coding boxes are numbered to match the questions to minimize confusion, and they are numbered over the top to correspond with the column numbers on a standard computer card.

Coding techniques vary depending on the type of question. Fixed responses can be given numbers which can then be filled into the appropriate coding boxes. Open-ended questions which require numerical responses, such as wage rates, are easy to fill into a set of coding boxes. However, open-ended questions, such as "What do you think was the best thing about the CETA program?", cannot have predetermined responses. For these open-ended questions, individual responses can be recorded in a list as the interviewing continues. Before adding a response, the interviewer should check to see if it is already listed. When the responses on this list are numbered, a coding appendix is created which can be used to provide codes for open-ended questions.

5. Format and Layout of the Questionnaire

There are a few general issues which are important in questionnaire layout. First, there should be ample room for writing answers to open-ended questions, or for making notes in the margin. On a mail questionnaire, extra space can make the questionnaire look less complicated. Second, prime sponsors can have questionnaire formats reduced in size so that more will fit on a page. However, reduced type can be more difficult to read. It may be wise to use regular size type on mail questionnaires so respondents will not have any trouble reading the questions. Finally, indenting questions or sections following a sorting question may make the skip pattern easier to follow, as in Example 19.

Example 19

1. "Are you currently working?"

   _____ Yes _____ No (GO TO QUESTION 3)

   2. "What is your job title?"

   _____

3. "Are you currently attending school?"

   ____ Yes ____ No

If the answer to Question 1 is "Yes", the interviewer proceeds to Question 2. Otherwise, the interviewer proceeds to Question 3 which is indented the same as Question 1.

IV. ORGANIZING THE FOLLOW-UP SURVEY

Prime sponsors have considerable flexibility in organizing a follow-up operation. This section discusses two key topics relating to the follow-up operation:

- o The functional areas which must be addressed by a prime sponsor if an efficient ongoing data collection operation is to be established; and

- o The selection of an organizational approach to address these functional areas.

A. Managing the Follow-Up Survey

To establish an efficient ongoing data collection operation, two key functional areas must be addressed regardless of the organizational or operational approach adopted by the prime sponsor. The first includes all aspects of the data collection effort which involve accessing and using the prime sponsor management information system, the major source of location and contact, personal characteristic and program information. The second area involves all facets of coordinating and implementing participant follow-up surveys.

1. Identifying and Organizing MIS Information

The process of identifying and organizing participant MIS data has three stages. First, the appropriate MIS files must be identified and accessed in a timely manner so that surveys can proceed on a continuous basis according to the standardized follow-up schedule. Second, all MIS data which may be of use in the participant location and contact process, such as home phone numbers and employers of job placed terminees, must be readily accessible to the data collection staff. Third, client characteristic and program information needed to supplement the post-program labor market data captured by the participant follow-up questionnaire must be identified and organized. These MIS data must be organized so that they can be merged with the follow-up information to form one complete record which can identify participants with respect to their pre-program labor force history, demographic characteristics, programs of participation, and post-program labor market activities. This process of data collection and organization will depend, in part, upon the type of management information system available.

Prime sponsors that operate manual MIS records will have to retrieve participant files by hand and arrange each participant's data set so that it can be physically linked with the follow-up data. This may involve the use of a separate participant information form to organize these MIS data elements. (A sample participant information form is included in Appendix F). Key data elements must be transferred from the MIS file to this form prior to any interview since the location and contact process hinges largely upon the information contained in the MIS. In addition, it will be helpful for the interviewers to review the participant's characteristics and pre-program and program history so that questions can be asked in the most fully informed context.

Prior to the transfer of data, instructions should be developed to indicate where each data element can be found in the manual MIS. This cross-reference should simplify and increase the accuracy of the manual MIS data transfer. In addition, a time schedule for the transfer must be established so that data will be available when follow-up interviews are attempted. If a six month follow-up period is used, the prime sponsor may arrange a schedule in which the relevant MIS information is transferred during the third month following termination, well ahead of the survey schedule.

If the prime sponsor has an automated MIS, the concerns are somewhat different than those for a manual system. Initially, the data collection team must become familiar with computer printout records, lags in the automation schedule (time necessary to automate a complete participant file), and any data elements which are not routinely automated. It should also be determined if the process will need to rely upon manual back-up or supplementation.[15]

With an automated MIS, the data identification and organization task is largely one of computer programming. It may be convenient to identify those data elements to be included in the follow-up data base and write a separate file in the computer system. Post-program data can then be added to the file. This process must stay

well ahead of the survey schedule. Printouts containing personal contact information and select participant characteristics and program and pre-program histories must be generated so that the survey schedule can proceed according to the standardized follow-up period.

Whether manual or automated, MIS problems will inevitably arise with respect to the availability, accuracy, and consistency of the data. Occasionally, questions or inconsistencies can be resolved by taking an individual case back to the MIS officer, counselor or other appropriate staff person. More often, however, inconsistencies or gaps in the data must serve as a basis for future improvements in record-keeping practices by continually underscoring the importance of an accurate data base and pointing out exactly where problems keep recurring.

2. Coordinating and Implementing Participant Follow-Up Surveys

The coordination and implementation of participant follow-up surveys entails the timely orchestration of various tasks all within the constraints of a uniform post-program follow-up period. Inevitably, the standardized follow-up period will vary as a result of obstacles encountered in the location and contact process. However, from a methodological as well as organizational perspective, it is important to adhere as closely as possible to the designated follow-up schedule.

Methodologically, the follow-up time schedule is crucial since the length of time participants spend in the labor market affects measurements of their post-program income and employment experiences. Therefore, a standard follow-up schedule must be adhered to so that program and population subgroup comparisons can be made fairly, based upon equivalent post-program exposure to the labor market. Organizationally, the uniform follow-up period is important so that an efficient routinized data collection operation can be fully established. Once serious lags develop in the schedule, a "ripple" effect tends to occur so that each successive month it becomes increasingly difficult for the prime sponsor to "catch up" and return to the proper timetable.[16]

Several important tasks must be implemented within an ongoing data collection schedule. First, interviewer work schedules must be organized and scheduled with flexible hours and shifts to insure sufficient location and contact success. These schedules must also allow for variations in activity level during peak and slack periods, reflecting terminations which have occurred in waves or clusters rather than at a constant rate.

Second, location and contact strategies must be determined and implemented. This entails the monitoring of various contact approaches with respect to time required, cost-effectiveness, and practicality. This information can then be used to make judgements regarding future strategies. All mailings to be sent as part of the location process must be scheduled and coordinated. These mailings will include introductory notification letters informing participants of the upcoming survey, and, for prime sponsors using a mail survey, the questionnaire.

A final task associated with the operation of participant follow-up surveys is the implementing and supervising of all data quality control activities. At a minimum, these activities should include monitoring the accuracy, completeness, and internal consistency of every questionnaire.

A high degree of organization and attention to detail will have both immediate and longer-term benefits. In the short run, a routinized data collection operation will minimize any strains on existing prime sponsor staff resources. In the long run, the attention to detail will pay off in terms of a cleaner, more accurate, and more usable follow-up data base.

B. Organizing a Data Collection Operation

Although various approaches can be adopted to create and organize a local follow-up system, the ultimate choice depends on the availability of prime sponsor financial and staff resources. One major decision prime sponsors must make is

whether to have their data collection activities conducted in-house or through outside contractors, such as colleges, universities, and survey research consulting firms. A similar decision must be made regarding the responsibility for data analysis and report writing. Prime sponsors must consider advantages and drawbacks of both in-house and contracted services in relation to their internal resources when designing a follow-up system.

Conceptually, operating a follow-up system in-house increases the likelihood that the operation will become a permanent organizational feature of the prime sponsor. The visible presence of an in-house system may tend to enhance the sense of ownership of and interest in the follow-up system, thus improving the chance that it will be relied upon for constructive inputs into the prime sponsor decision-making process.

Operationally, the most significant advantage of an in-house follow-up system is that staff will be familiar with program objectives, delivery agents, and operational practices. This experience is helpful in the identification and resolution of any MIS questions, particularly those related to the nature, type, sequence, or duration of program activities. A high level of insight also enables the interviewer to assist the respondent in focusing upon the appropriate time period and set of activities, and decreases the chance that a misunderstanding or misinterpretation of a question or response will occur. From an analytical perspective, an enhanced understanding of program objectives and operations increases the likelihood that program effectiveness will be accurately judged.

A primary disadvantage of the in-house approach is that it is potentially disruptive to existing prime sponsor operations. Not only does this activity represent a net addition to overall staff work, but it requires a level of flexibility which may pose an added strain on prime sponsor operations. Specifically, since much of the interviewing is done after 5:00 p.m. and on Saturdays, staff and office facilities must be available at these hours. Also, the variable nature of the interview schedule over the course of a fiscal year hinders the establishment of permanent work assignments.

In contrast, an outside resource is more likely to have the flexible part-time staff needed to accomodate the variable schedules associated with a data collection operation and have access to resources such as telephones, office space, and computer facilities. In addition, the overall credibility of the study is generally enhanced when more "objective" outside parties are used. Although this issue is most relevant in terms of the analysis, there is a degree to which it applies to the data collection efforts as well.

V. CONTACTING AND INTERVIEWING FORMER CETA PARTICIPANTS

This chapter has focused upon organizational and developmental issues which require consideration prior to the actual collection of follow-up data. The following discussion is more operationally oriented and focuses upon the process of contacting and interviewing former CETA participants. Specifically, this section reviews techniques and strategies for eliciting accurate, useful responses from participants. These discussions are primarily concerned with the contacting and interviewing process associated with telephone and personal visit interviews, although the operation of mail surveys is also reviewed.

A. Locating Former Participants

Rates of response are affected by factors which characterize individual prime sponsors, such as their size and location, the accuracy and completeness of the local management information system's records, program and participant characteristics, and surrounding labor market conditions. There are, however, various search procedures which generally apply to a wide variety of circumstances. These include the use of introductory notification letters, original calls and callbacks, local directories, direct mail methods, and the use of outside resources such as employers, relatives, and program operators.[17]

1. Introductory Notification Letters

Before any follow-up interviews are attempted, it is important to formally notify respondents of the survey through an introductory letter. This letter should inform the respondent of the upcoming interview, stress key parameters of the follow-up story, and highlight the voluntary and confidential nature of the interview. In doing so, the letter should establish the credibility of the follow-up operation with potential respondents and enhance the likelihood that they will participate in the survey. Two sample letters are presented in Appendix G.

The mailing of introductory letters is also the first step in the participant location process. It provides a mechanism to both judge the accuracy of participant addresses on file and facilitate future search procedures. First, letters returned as undeliverable identify the first group of participants who will be difficult to locate. Second, when coupled with use of the U.S. Postal Service address correction service, the notification process can insure that all forwarding addresses are obtained for those individuals who have moved since enrollment. Subscribers to this service receive a card from the Postal Service noting the new address and the date the address change was submitted. The subscriber is only charged for successful tracking attempts. Third, business reply postcards can be included with the introductory letter, asking terminees who received the letter to fill in their current address and phone number and return the card. A sample business reply card is shown in Appendix G.

2. Original Calls and Callbacks

Generally, the initial interview call should be attempted between 4:00 p.m. and 8:00 p.m., a time when many respondents are likely to be arriving home from work. For those contacted, the interview should be conducted immediately. If it is not convenient for the respondent to complete the interview at that time, arrangements should be made to call again at a more convenient time. When terminees are not initially contacted, they should be called back for a few consecutive evenings. If

contact is still not made at that point, calls should be made at various times during the day. If a participant works the same hours each day, attends class, or has a habit of not being at home during particular hours, callbacks which occur at the same time each day will rarely lead to a contact. After five to ten days, an alternative contact approach should be attempted.

3. The Use of Directories

Perhaps the most useful alternative approach is the use of directory listings which are available in many forms.

- Local directory assistance usually has current telephone numbers, although it may take as much as a week for a changed or new number to be registered with directory assistance.
- The local telephone book may list other individuals with the same last name. When practical, a call to the other numbers listed under the same last name may yield new information about a difficult-to-contact participant.
- There are directories which cross-reference individuals by name, address, and telephone number. These references can be used to both update or check a telephone number or locate neighbors who may have useful information. They are generally published annually or biannually and are available from private firms on a commercial basis.

Prime sponsors are advised to use all these methods.

4. Direct Mail Methods

A direct mail method can be used for any participant for whom the initial notification letter was not returned, but for whom telephone contact cannot be made due to unpublished, changed, or disconnected telephone numbers. In such cases, a second letter is sent emphasizing that interviews are underway but that, to date, no accurate telephone number for the respondent has been found. This follow-up letter should refer to the first letter and restate the purpose of the interview and its confidential nature. It should include a business reply postcard requesting a current name, address and telephone number, and a convenient time to conduct the interview. The letter should also provide a telephone number which can be called to arrange or conduct an interview, and should note the hours when return calls can be made and whether collect calls will be accepted.

5. Other Information Sources

In addition to callbacks, directories, and direct mail, several other search procedures are available. These fall into the following general categories:

- o Using job placement and other post-program information,
- o Contacting friends and relatives, and
- o Using prime sponsor records other than MIS files.

For job placed terminees, the local MIS can be used to obtain the name and telephone number of their employers. By contacting the firm, it may be possible to speak with the participant to arrange an interview, or to leave a name and telephone number for the participant to call. Even if the participant is no longer employed with the firm, the personnel office or another employee may have some information about how the participant can be contacted with a forwarding address of either a new residence or a new job. When appropriate and available, schools or training programs listed in the MIS can also be contacted either to arrange an interview or to obtain a current name, address and telephone number.

If the prime sponsor routinely records an emergency telephone number on the participant's MIS record, it may be possible to contact friends or relatives who can help in the location process. They may know a new phone number, times the individual can be reached at home, or even a new name or a spouse's name in the event of a recent change in marital status.

Prime sponsor records other than the MIS are another potential source of contact information. For instance, the financial records unit may have the latest addresses, especially when the prime sponsor mailed a final stipend payment after the particiant left the program. In addition, the subcontractor through which the participant received services or a counselor may have a current address.

The choice and pursuit of various location procedures must always be sensitive to issues of privacy and confidentiality. For instance, if participants have given an emergency telephone of a friend or relative, all other equally viable approaches should be tried first. While cooperation is generally not a problem, respect for the privacy of the participant, friend, relative or employer is a concern which the prime sponsor must clearly convey to the data collection staff.

B. Conducting the Follow-Up Interview

The quality of follow-up data depends partly upon the training and experience of staff interviewers. Therefore, it is important for the prime sponsor to provide a level of training to insure that interviewers are well versed and comfortable with standard interviewing techniques. As part of this training, new interviewers should listen to experienced interviewers conduct actual interviews, and then conduct mock interviews. These mock interviews should be structured to include various combinations of post-program activities, different levels of respondent cooperation and understanding, and terminations from various programs.

Although most of the interviewer training must take place in advance of the first phone call, an ongoing training component should also be established. This will allow interviewers to share anecdotes and discuss techniques so that all may benefit from increasing levels of experience.

Some basic interview techniques and approaches which should be routinely included in interviewer training are:

- Getting the participant to respond,
- Using the survey instrument properly,
- Listening to the respondent, and
- Probing for a more accurate or complete response.[18]

1. Getting the Participant to Respond

Although experience indicates that most terminees are willing to be interviewed, there are several instances in which they may be reluctant to participate in a survey. The interviewer's response will depend upon the specific situation. First, the participant may have been contacted at an inconvenient time. If so, the interviewer should arrange another time to complete the interview. Second, individuals may be confused about their CETA experience, especially if they participated in short-term job search assistance or OJT programs which they may not have known were CETA affiliated. In these instances, the interviewer, using the specific programmatic profile on the participant's MIS records (exact program name, dates of participation, etc.), can attempt to jog the respondent's memory by piecing together the individual's experience.

Some participants may be hesitant for less specific reasons. In these cases, interviewers should explain three points concerning the interview. First, they should stress that the interviews are generally brief. If a questionnaire such as the one in Appendix C is used, on average, between 7 and 12 minutes is required for completion. Second, interviewers can note that all information is confidential and used only in statistical summary form, not in a form that can identify specific individuals. Third, interviewers can explain why follow-up studies are necessary to provide a basis for program improvements.

2. Using the Survey Instrument Properly

Generally, questions in the survey instrument should be straightforward and not subject to interviewer bias, or misinterpretation by the respondent. They should be asked exactly as worded to insure both the desired focus of the response and consistency across interviews. Efforts should be made to avoid hinting at presumed responses and making offhanded comments that could influence a respondent's answer.

In addition to using the proper wording for each question, the interviewer must properly use all "applicability criteria". A questionnaire designed to record a full range of post-program experiences contains more sections and questions than may be applicable to any one respondent. Interviewers need to learn which sections apply to various situations to insure that all pertinent data is captured.

3. Listening to the Respondent

The importance of continuously listening to the respondent cannot be over emphasized. Interviewers must listen to respondents even while recording a response because even a brief statement or comment may indicate that the participant misunderstood the question or that the interviewer misunderstood the answer. Additionally, interviewers should not interrupt respondents except when they stray from the topic of the question. An attempt by the interviewer to paraphrase or summarize an incomplete answer can lead to inadequate levels of detail and inaccurate data.

4. Probing for a More Accurate or Complete Response

When the respondent's answer is not clear, or indicates that the question was misunderstood, further probes are necessary to obtain accurate answers. Several general approaches to probing are discussed below.

- Repeating the Question

  Often the respondent may not understand a question, may misinterpret it, may not be able to decide upon an answer, or may wander off on an unrelated topic. In such instances, the first and most effective step is to repeat the question. Many respondents may not have fully heard the question the first time or may have missed the question's emphasis. Simply repeating the question may be all that is necessary to obtain a more accurate response.

- Repeating the Response

  It may be useful for the interviewer to adopt the habit of repeating the respondent's answer word for word as it is recorded. This acts as a check so that the respondent knows precisely what is being recorded, and provides an opportunity to validate or double-check the answer. In cases where the answer is clearly off track, simply repeating the answer in a neutral, unbiased manner may help the respondent sense the inappropriateness of the response.

- Probing for Further Clarification

When repeating the question or the response does not seem to clarify the issue, further probes are required. Such probes should indicate that the interviewer is interested and desires more information. For instance:

"Could you tell me more about what you are thinking?"

"Would you tell me what you have in mind?"

"What do you mean?"

"Why do you feel that way?"

"Which would be closer to the way you feel?"

The interviewer knows the objective of the question, the respondent does not. Successful probing of the sort described here requires that the interviewer recognize when a response does not meet the objective of the question.

- Probing for Further Accuracy and Precision

Instances may arise when it is apparent to the interviewer that a more precise response may be possible through the use of probing after the initial question and answer. The following conversation is a brief example of this approach:

Question:	"What was your starting hourly wage rate?"
Answer:	"Oh, about $4.00."
Probe:	"I see. Would you say it was more than $4.00 or less than $4.00?"
Answer:	"Less than $4.00."
Probe:	"Well do you think it was more than $3.75?"
Answer:	"Oh yes, it was $3.90."
Interviewer:	(As $3.90 is being recorded) "Oh, O.K., Very Good."

- Silence or "I Don't Know" Responses

The interviewer should not assume that when a question is met with silence or by the respondent saying "I don't know", that the respondent in fact does not know. There are several possibilities to be considered in such a situation.

  - The respondent does not understand the question,
  - The respondent requires some time to think and says "I don't know" to buy time, or
  - The respondent has an answer to the question but does not want to give it and wishes to evade the question.

In these cases, it may only be necessary to repeat the question, offer more time to think about it, or offer to return to the question later. If it becomes clear that the respondent does not want to answer, the interviewer must quickly determine what level and type of probing may be constructive without alienating the respondent. In such circumstances it may be appropriate to remind the respondent of the confidential nature of the interview.

VI. QUALITY CONTROL AND DATA PROCESSING

For the telephone/personal visit surveys, each interviewer should thoroughly review the questionnaire immediately after the interview is completed. For open-ended questions, a code will have to be assigned to each response. The accuracy of this coding can be increased if it is done while the interview is still fresh in the interviewer's mind. Even for fixed response questions, a review of the responses soon after the interview makes it easier to detect any errors. Another advantage of immediate checkings is that, if inconsistencies exist or questions arise, the respondent can be called again for clarification.

Once the questionnaire is correctly coded, it should be reviewed by an individual in a supervisory position. This second stage of checkings should focus on the overall completeness and internal consistency of the questionnaire. There are various consistency checks which can be made on a questionnaire. For instance, the dates began and ended jobs should all be consistent, the number of jobs held in the follow-up period should be the same as the number of jobs listed, and the starting and final hourly wage rates on any job should bear some relationship to each other. It is also crucial to check and insure that all coding boxes are filled in and proper use made of the "missing value" codes to distinguish a question which is "not applicable" from one in which the respondent "does not know" or "refuses to answer."

Another issue of concern for telephone and personal visit interviews is verification that interviews were actually conducted. For telephone interviews conducted in a centralized, well supervised location, verification should not be a major concern. For telephone interviews not conducted at a centralized location (e.g. at the interviewer's home), and for personal visit interviews, verification of a five to ten percent sample is recommended.

In a mail survey, an interviewer or staff person must review and code each questionnaire as it is returned. This step provides an opportunity to check the responses for completeness and consistency prior to processing the data, although, practically, the respondent cannot be reached to clarify any inconsistencies.

If the prime sponsor uses computer facilities to process and statistically analyze the follow-up data, more extensive edit checks should be undertaken prior to using the data for report writing. Additional editing and quality control procedures can be established which take advantage of the automated data processing capability. In addition to uncovering coding, keypunch and data entry format errors, this process should also provide range checks on the responses to each question as well as the more sophisticated internal consistency checks which are too time-consuming to perform by hand.

FOOTNOTES TO CHAPTER THREE

1. Those who did not respond the first time were sent a mailing two weeks later.

2. It is unclear if this is reflective of legitimate scheduling conflicts which could not be resolved or simply a way of refusing the interview.

3. For the purposes of comparing the survey methodologies, a rather complex coding scheme was necessary to convert mail survey results to a format consistent with the telephone and personal interview data. Some of the data quality problems may have resulted from this coding procedure but certainly not frequently enough to account for the vast disparity.

4. The cost figures do not include the time of supervisory personnel who were managing the entire operation.

5. If the categorized approach were used (Option B), it would be impossible to determine, for instance, how many individuals worked exactly 7 hours per week.

6. To be classified as "unemployed", an individual is not working for pay but is looking for and available for work. A person who is "out of the labor force" is not working for pay and is either not looking for or not available for work.

7. The current population survey (CPS) asks respondents to recall if non-working members of the household looked for work during the four weeks immediately preceeding the interview week. Despite this short recall period, a national study recently presented evidence that the data resulting from the CPS are not fully able to distinguish between individuals who are unemployed and those who are out of the labor force. See: Clark, Kim B. and Lawrence H. Summers; "Labor Market Dynamics and Unemployment: A Reconsideration;" Brookings Papers on Economic Activity; 1979: 1, pp. 13-60.

8. An examination of the data collected as part of the Region One Follow-Up System shows that estimates of total weeks do not appear to be consistent with dates estimated for the same time period. Checks for internal consistency indicate that the dates are generally more accurate.

9. This table is currently being utilized by the Region One Follow-Up System and is included in the questionnaire in Appendix C.

10. This would have already been accomplished had the Continuous Work History Table collected detailed rather than overview information on each activity. This approach was field tested by Westat, Inc. during the development of the CLMS survey instruments and was found to be a less effective method of gathering data.

11. Recent experience in Massachusetts has shown that over ninety-six percent of more than three thousand former CETA participants contacted and interviewed six months after termination held two or fewer jobs. Thus, collecting information on only two post-program jobs will both provide a virtually complete picture of a participant's labor market activity in the follow-up period and allow for approximation of post-program earnings. For those prime sponsors interested in this approach, it is important to clearly specify those data which will be collected. One possible list of useful job related information is presented below:

- o Job seeking methods
- o Starting hourly wage rate
- o Final or current hourly wage rate
- o Hours worked per week
- o If no longer working for employer, reason for leaving

In addition to obtaining detailed information about the first and current or last job in the follow-up period, it will also be useful to collect information about the labor market activities of participants who were either not working immediately after leaving the program or who were not working at the follow-up interview. The period immediately after program termination is of particular importance in gauging the immediate benefits of CETA participation. While some period of job search is expected of those individuals not job placed, information on the nature and extent of job search activity can be quite important.

It is reasonable to expect participation in employment and training programs to not only increase the level of their participants' skills, but also to provide them with greater familiarity with the labor market generally. If participants are not working and not seeking employment immediately after program participation, this should be a matter of some concern to prime sponsors, particularly if such an outcome is repeatedly associated with one program activity to a greater degree than other activities. Similarly, the employment status of participants at the time of the follow-up interview can also be an important indicator of the extent to which particular programs result in relatively more or less job search activity by those who are not employed.

For those former participants who are not employed either immediately after leaving the program or at the time of the follow-up interview, the following data elements could be included on the questionnaire:

- o Total weeks spent looking for work
- o Total weeks spent looking for work
- o Reasons for no job search

12. See: Gorden, Raymond L., Interviewing: Strategy, Techniques and Tactics; The Dorsey Press, Homewood, Illinois, 1980; pp. 361-366.

13. For example, questions about personal or family income, or public assistance status.

14. It should be noted, however, that keypunchers generally have an easier time working from standardized coding sheets, which may reduce the propensity for data errors.

15. This case will arise in those instances where the prime sponsor has decided not to automate all data elements, as is typical for the details of the pre-program work history.

16. If the prime sponsor trys to return to the proper time schedule, it will often require a major staff effort which may be disruptive to other areas of operation.

17. For a complete discussion of location and contact strategies see: Furlong, Dianne, A Guide to Locating and Contacting Respondents for Follow-Up Surveys; Massachusetts Department of Manpower Development, Policy and Evaluation Division, June, 1981.

18. For a more complete discussion of interviewing techniques see: Gorden, Raymond L., op. cit.

CHAPTER FOUR

ANALYZING LOCAL FOLLOW-UP DATA

ANALYZING LOCAL FOLLOW-UP DATA

I. INTRODUCTION

The previous three chapters of this guide have addressed several issues prime sponsors should consider when designing and implementing local follow-up systems. Once the systems are implemented, prime sponsors will have to decide how their follow-up data will be used for assessing program performance. This chapter addresses this issue by reviewing a set of topics related to analyzing local follow-up data. The three major topics covered are the following:

- Issues related to selecting measures of program outcome;
- Alternative types of follow-up reports and the structure of the follow-up report; and
- Ways follow-up can be used to assess the longer-term performance of local programs.

II. SELECTING MEASURES OF PROGRAM OUTCOMES

When undertaking an analysis of local follow-up data, prime sponsors must select the most appropriate program outcomes measures. In making this selection, it is important for prime sponsors to consider the merits of all potential measures, and their relationship to both the goals and objectives of programs and local information needs. Decisions among alternative outcomes measures can have a significant bearing on the accuracy of follow-up findings in depicting program performance, and their usefulness for local decision-making purposes.

Ideally, the choice of an appropriate measure or set of measures of program outcomes should depend on the objectives of the programs being evaluated. Since each program is designed to achieve a specific objective, it is important for local planners and administrators to identify these objectives as well as how they can best be measured. In most cases, while local programs have the broad goal of increasing former participants' employment stability and earnings, it is likely that they attempt to accomplish this goal in different ways. For example, a program

designed to serve those characterized as having "hard core" unemployment problems may have as its primary objective placement into and retention of unsubsidized jobs, with lesser emphasis on the quality of that employment. In contrast, programs geared to the problems of the working poor would be more appropriately measured by the hourly wage rates earned by participants during the follow-up period. These potential differences in objectives clearly indicate the importance of clarifying the purpose of local programs as well as the manner by which their performance can be most appropriately measured.

In certain instances, prime sponsors may also have to base their selection of performance measures on factors other than goals and objectives. For example, prime sponsors may receive reports on or evidence of certain inefficiencies in their programs. In other instances, members of the local planning council or local officials may request particular types of information regarding the post-program performance of local employment and training programs. In these cases, it may be desirable and necessary to select a set of outcomes measures designed to address the concerns which have been expressed.

The remaining portion of this section is designed to review the strengths and weaknesses of seven commonly used measures of post-program performance. These outcomes measures are:

- Placement into Unsubsidized Employment,
- Labor Force Status in the Follow-Up Period,
- Job Retention,
- Weeks of Employment,
- Hourly Wage Rates,
- Average Annual Post-Program Earned Income, and
- Gains in Gross Earned Income.

A. Placement Into Unsubsidized Employment

The first outcomes measure which may be considered by the prime sponsor is the success of local programs in placing participants into unsubsidized jobs. This measure is determined by the following calculation:[1]

$$\text{Percent of Terminees Placed in Unsubsidized Jobs} = \frac{\text{Number of Job Placements}}{\text{Total Number of Terminees}} \times 100$$

The major strength of this outcomes measure is that it is consistent with a primary objective of the CETA Title II delivery system. Additionally, as one of the Department of Labor's performance indicators, the information should be readily available from the prime sponsor MIS and can be used to compare current with previous levels of performance as well as with those of other programs.

There are, however, several shortcomings associated with this outcomes measure. First, it captures information only immediately following program termination. As such, it does not provide a basis for judging the longer-term benefits of program participation.[2] Secondly, success in generating a certain level of unsubsidized job placements does not address differences in the types and quality of employment generated for program terminees.

The third shortcoming is that overreliance on this performance indicator may discourage the provision of services to those most in need. Since it will be easy to achieve high levels of placements by serving those with comparatively limited barriers to employment, prime sponsors may become inclined to "cream" from the eligible pool of applicants and provide only a minimal level of services to the more disadvantaged segments of the local population.

B. Labor Force Status in the Follow-Up Period

A second measure of post-program performance is the labor force status of participants at a given point in the follow-up period. Categories which have traditionally been used to measure this type of program outcome are:

- Employed (working for pay),
- Unemployed (Not working for pay, but looking for and available for work), and
- Out of the Labor Force (Not working for pay and either not looking for or not available for work).

The terminees' labor force status at a particular point in time can be measured at any juncture during the follow-up period, e.g. at three, six or nine months. To assess former participants' labor force status at the time of follow-up contact, the appropriate measurements are:

$$\frac{\text{Number Employed at Follow-Up Interview}}{\text{Total Number Contacted for Interview}} \times 100 = ____ \text{ Percent}$$

$$\frac{\text{Number Unemployed at Follow-Up Interview}}{\text{Total Number Contacted for Interview}} \times 100 = ____ \text{ Percent}$$

$$\frac{\text{Number Out of Labor Force at Follow-Up Interview}}{\text{Total Number Contacted for Interview}} \times 100 = ____ \text{ Percent}$$

TOTAL

100 percent of Population Contacted for Interview

Measures of post-program labor force status provide information on the success achieved by terminees in securing employment. In addition, this measure also provides an added time dimension and a detailed perspective on those who are not working at a particular point in time.

There are, however, several drawbacks associated with the use of this outcomes measure. First, such measures of post-program labor force status do not consider the type and nature of work performed. Inter-program comparisons of effectiveness based upon this outcomes measure could have limited usefulness due to differences in wages and skills of the jobs held. Secondly, labor force status measures reflect only one point in time and do not fully represent total post-CETA employment experiences of terminees.

C. Job Retention

Another outcomes measure is job retention. This measure can be defined in two ways: 1) as the number of weeks that program terminees remain employed on the job into which they were placed upon termination; and, 2) as the percentage of those

job placed who are still employed on the same job at the time of the follow-up interview. This latter definition is calculated as follows:

$$\frac{\text{Total Job Placed and Still Employed on Same Job at the Time of Contact}}{\text{Total Number of Job Placed}} \times 100 = \text{Percent of Job Placed Still Employed}$$

In contrast to the point-in-time measures discussed above, measures of job retention provide a more continuous longer-term perspective of program performance. As such, this measure is quite useful for gaining insights into post-program job stability.

Despite apparent merits of job retention, it does possess several limitations. First, the exclusive focus on job placements does not provide any insight into the employability of terminees who were not placed in a job or did not find a job on their own upon termination. Secondly, an examination of employment patterns associated with only the "placement" job provides an incomplete picture of post-program labor market experiences when terminees have left their placement jobs at some time during the follow-up period. For example, an individual may have experienced a low level of job retention because of the opportunity to secure a higher paying job. The third limitation is that, like measures of job placement and labor force status, post-program job retention does not take into account the types and nature of employment opportunities available to former participants.

D. Weeks of Employment

A fourth outcomes measure that can be considered by prime sponsors is the total number of weeks of employment during the post-program follow-up period. This measure can be expressed as the total number of weeks worked on all jobs held during the follow-up period (Equation A below), or as the percentage of the total follow-up period which was spent employed (Equation B below).

A. $\sum_{j=1}^{N} WKS_j$ Where: WKS_j = Number of weeks worked on job j
N = Number of jobs held in the follow-up period

B. $\frac{\text{Total weeks of employment}}{\text{Number of weeks in the follow-up period}}$ X 100 = Percent of Total Follow-Up Period Employed

The strengths of this outcomes measure are considerable, particularly in that enhanced employment stability is a primary objective of many CETA programs. Unlike the job retention indicator, total weeks of employment measures performance over the entire post-program follow-up period and applies to all CETA participants, regardless of their termination status.

Major drawbacks to weeks of post-progra employment are that: 1) since it is a gross measure of program outcome, it does not measure the independent contribution of the program to weeks of employment; and, 2) it does not account for the quality of employment obtained by former participants. Thus, instances of steady employment accompanied by relatively low wages and poor working conditions would not be captured by this measure.

E. Hourly Wage Rates

An additional outcomes measure which may be used is the average hourly wage earned by former participants. This measure can capture the average hourly wage over the entire follow-up period or the actual hourly wage rate at a particular point in time. To calculate the average hourly wage rate over the entire follow-up period, prime sponsors must identify the wage earned by participants on each post-program job and weigh it against the length of time spent employed on each of these jobs. The formula that would be used is:

$$\sum_{j=1}^{N} \frac{W_j * WKS_j}{WKS_j}$$

Where: W_j =Hourly wage earned on the jth job

WKS_j =Number of weeks worked on job j

N =Number of jobs held in the follow-up period

The strength of this measure is its ability to reflect the degree to which participation in a program has enhanced the productivity of participants. To the extent that hourly wage rates reflect productivity, those who realized significant benefits from the program would, in a relative sense, earn higher wage rates. This indicator is also a partial reflection of the value that the labor market places on the skills which have been acquired through participation.

However, when prime sponsors choose to measure hourly wages at a particular point during the follow-up period, judgements of program effectiveness will also be limited since they are not based upon any knowledge about the employment stability of participants. While a participant may have earned a high hourly wage rate, it may only have been earned during a brief portion of the post-program period. A final limitation is that, like total weeks worked, measures of hourly wages reflect a gross program output. As such, issues arise related to the targeting of services, and the accurate assessing of the independent effects of a program.

F. Average Annual Post-Program Earned Income

The most comprehensive measure of post-program performance available for use by prime sponsors is the average annual post-program earnings of former CETA participants. Such a measure could be calculated as follows:

$$Y = \overline{W} * \overline{H} * WKS * 52/TW$$

Where:

- Y = Annualized earnings of the participant based on income earned over the follow-up period
- $\overline{W}$ = Average hourly wage rate earned by the participant over the follow-up period
- $\overline{H}$ = Average hours worked per week by the participant over the follow-up period
- WKS = Total number of weeks each participant is employed over the follow-up period
- TW = Total number of weeks between the date of termination to the date of interview

This gross outcomes measure provides a comprehensive measure of post-program performance, containing both an employment component (hours and weeks worked), and an earnings component (average hourly wage). The overall status of terminees' earnings and employment can thus be judged using this summary outcomes measure. However, because annual earnings is a summary measure, it is not possible to distinguish how different programs generated a given level of earnings. Since earnings are the product of wage rates and employment, any level of earnings reflects both job quality and employment stability.

G. Gains in Gross Earned Income

As a gross measure of post-program output, average annual earnings does not identify that portion of post-program income which would have been earned in the absence of participation in the program. To the extent this is unknown, there may be an incentive for prime sponsors to serve the less disadvantaged, that is, individuals more likely to earn comparatively higher incomes regardless of their training.

One way to avoid incentives to serve the less disadvantaged is to judge post-program performance on the basis of any gains in former participants' earned income. This outcomes measure is quite desirable for local follow-up purposes since it explicitly reflects the basic intent of CETA and will allow prime sponsors to identify the independent contribution of program participation to earnings during the follow-up period. Gains in earnings also takes into account the stability and continuity of post-program employment as well as changes in participants' hourly wages. As such, the use of this measure should create an incentive for the prime sponsor to serve the more disadvantaged.

From a practical perspective, prime sponsors may encounter certain technical difficulties when attempting to measure gains in earned income. First, to the extent that pre- to post-program comparisons are used to calculate income gains,

prime sponsors will have to carefully select a pre-program period sufficient in length to accurately portray the prior employment and earnings status of former participants. Even resolution of this issue, however, will not necessarily result in accurate estimates of income gains due to the potential influence of 'maturation' and changes in the condition of the local economy.[3]

Secondly, while the use of comparison or control groups may well result in more accurate estimates, such an approach will likely not be pragmatic for broad scale local follow-up efforts. Therefore, prime sponsors will have to give serious consideration to both the use of this outcomes measure as well as the manner by which it will be estimated.

The above discussion has focused on the major strengths and weaknesses of alternative program outcomes measures. Table 4-1 presents, in summary form, the relative merits of each of the seven measures discussed above.

III. SHAPING THE LOCAL FOLLOW-UP REPORT

There are two key issues prime sponsors will have to consider once outcomes measures have been selected. The first issue involves selecting the type of follow-up reports to be prepared and used for planning purposes. Prime sponsors can choose between descriptive and analytical reports. Descriptive reports are designed to provide an overview of program performance. Such reports rely on any number of program outcomes measures and seek to determine the uniformity of performance across both programs and selected population subgroups. A major feature of this type of report is that it identifies how well local programs perform rather than why they perform as observed.

Since descriptive reports are not inferential in nature, they tend to rely on basic statistical techniques, such as tests between means and contingency table analysis.[4] As a result, these types of reports can only provide limited direction for determining how local performance can be improved. Descriptive reports are, however, easy to prepare and can identify those areas of the local delivery system that may require improvements.

Table 4-1: Measures of Program Outcome

Definition	Advantages	Disadvantages
A. Placements Into Unsubsidized Employment o Participant placed in unsubsidized employment	o Primary objective of program	o Not a good measure of long-term program benefits o Does not address issue of type and quality of employment
B. Labor Force Status in the Follow-Up Period o Participant is either employed, unemployed or out of the labor force	o Employment is a major focus of the program o Provides broader view of participant's status than job placement; includes those not working	o Point-in-time measure provides only limited view of activity over time o Does not address issue of type or quality of work o Does not provide indications as to why participant is unemployed or out of the labor force
C. Job Retention o Number of weeks program terminees remain employed on the placement job	o Employment is an important long run program objective o Measure of stability of employment	o Only measures work on placement job although switch to another job could represent improvement o Provides no consideration of compensation per week of work o Provides no indication of employability of those terminees not job placed
D. Weeks of Employment o Number of weeks worked in follow-up period	o Employment is important long run program objective o Measures job stability o Looks at experience of entire follow-up period, including job changes	o Provides no consideration of compensation per week of work or employment o Cannot reveal independent contribution of program to participants' employability

Table 4-1: Measures of Program Outcome (Cont.)

Definition	Advantages	Disadvantages
E. Hourly Wage Rates o Hourly wage rate at start of first job, average over follow-up period or at time of interview	o Measures the ability of the participant to generate earnings for each hour of work o Reflects value that labor market places on skills which have been acquired	o Does not distinguish between possible other factors which may affect post-program wages (e.g. previous work experience) o Does not measure employment stability
F. Average Annual Post-Program o Annualized income earned over the follow-up period	o Measures ultimate long-term program goal o Provides summary measure of program benefits	o Gross earned income is a summary measure and does not provide an ability to understand the source of variation; wages or weeks of employment o Does not provide insight into which portion of the post-program income would have been earned without program participation
G. Gains in Average Annual Earned Income o Difference between earnings in the year prior to the program and the annualized earnings over the follow-up period	o Provides summary measure of program benefits o The change in earnings measures the impact of the program and removes the effects of individual socio-demographic characteristics	o Earnings in the year previous to the program may not be representative of long-term earnings and may not fully control for individual characteristics o The implementation and use of either a control or comparison group, while theoretically feasible, will likely not be practical for broad scale local implementation

When prime sponsors wish to gain more insight into the performance of their delivery systems, analytical reports can be quite useful. These reports are more inferential in nature and rigorous in design than descriptive reports. Analytical reports tend to focus on a detailed examination of a narrow range of performance measures to determine both the independent effects of program participation, and how the performance of certain programs can be sustained and that of others improved.

Analytical reports may be more desirable due to their ability to provide specific direction for improving local programs. In making a selection, however, prime sponsors should carefully consider their specific information needs and their ability to use the findings from analytical reports. In cases where prime sponsors have had limited experience with analyzing and using follow-up data, descriptive reports may be desirable. Since descriptive reports are not complicated, they can serve to both introduce the sponsor to post-program performance measures and aid in a determination of the most useful types of analytical reports to produce in the future. Table 4-2 lists the major strengths and weaknesses of these two types of reports.

The second issue to be considered is structuring the local follow-up report. Follow-up reports must be prepared to show a complete and consistent picture of the post-program experiences of former participants with respect to a particular outcomes measure. Follow-up reports which include a number of outcomes measures not related to one another, or which, by design, exclude certain types of individuals, may be of limited value since they may not be capable of fully assessing program performance. Prime sponsors should shape their follow-up reports in a way that most fully describes how former participants have fared in the labor market.

This can be accomplished by both tracing a particular aspect of former participants' post-program employment and earnings experience, and conducting complementary analysis of former participants who may be excluded from an outcomes measure. For example, if post-program hourly wage rates are selected for analysis, prime sponsors should examine this outcomes measure at several points in time to provide

Table 4-2: Major Strengths and Weaknesses of Alternative Types of Follow-up Reports

Advantages	Disadvantages
Descriptive Reports	
o Can provide a comprehensive overview of several aspects of performance o Relatively easy to prepare and not very time-consuming o Can provide general direction for areas requiring improvement or further analysis o Relatively easy to read and a useful starting point for prime sponsors	o Limited in their ability to provide specific and detailed direction for program improvements
Analytical Reports	
o Well focused on a particular issue o Capable of and designed to isolate program effects o Can provide clear direction on how to improve program performance	o Time-consuming to prepare o Difficult to present in a nontechnical manner o Requires the use of technical rigor o Requires availability of technical expertise

for an assessment of both absolute post-program earnings and changes which may have occurred during the follow-up period. Also, certain outcomes measures, such as job retention, may exclude all participants who were not job placed as well as the consequences of leaving a placement job for those who were. To address this, it will be necessary to conduct complementary analysis of the post-program employment experiences of both non-placements and those who left their placement jobs prior to the follow-up interview. Such an approach would result in follow-up findings that could be linked together and generate a more complete picture of several aspects of post-program employment.

IV. AN ILLUSTRATION OF HOW TO USE AND ANALYZE LOCAL FOLLOW-UP DATA

This section of the chapter describes how follow-up data can be analyzed and used to assess longer-term performance of local programs. The data used for this illustration include over 3,600 program participants who terminated from occupational training and job search assistance programs funded under Title IIB of CETA and operated by ten Massachusetts prime sponsors. These individuals terminated from programs during the March 1978 to March 1980 time period, and were contacted and interviewed over the telephone on their six month post-program anniversary date.

The major focus of this illustration is on comparisons of participants' starting and final post-program hourly wages as well as their total number of weeks worked. For each outcomes measure, increasingly detailed and sophisticated analyses are conducted to provide prime sponsors with examples that can be used to guide the preparation of local follow-up reports. Additionally, since prime sponsors possess a fair degree of control over the type and nature of services to be offered, the illustrative comparisons should be useful in depicting how follow-up data can be of assistance in making program mix decisions.

A. The Programs to be Analyzed

The former participants who are included in this analysis terminated from two types of programs typically offered on the local level, job search assistance (JSA) and occupational training (OT). Since many prime sponsors offer these as program alternatives, information on their relative effectiveness can be used in local service mix decisions. This section of the chapter illustrates the first step in analyzing follow-up data and includes a description of the nature and purpose of the two programs under study.

1. Job Search Assistance

Job search assistance programs are founded on the premise that the major barrier potential participants face in the local labor market is insufficient knowledge of job search techniques. Job search assistance programs generally range from one to eight weeks in duration and provide participants with the support they need to obtain employment more quickly than they could otherwise.

The terminees included in this analysis received two major types of job search assistance services. First, approximately 85 percent received only direct placement types of assistance. These participants were identified as the most "job ready" in that they possessed marketable skills but were experiencing some difficulty in securing employment. For some, attempts were made to develop jobs and place them directly into unsubsidized employment. For others who had marketable skills, but who could benefit from some instruction in search skills such as interviewing techniques and how to present oneself to a prospective employer, limited services were available. These services consisted of a very brief seminar on where and how to find a job, resume writing, interviewing techniques and other related topics.

The remaining 15 percent of the participants received more intensive job search assistance for about four to six weeks. These individuals, while also possessing marketable skills, were identified as relatively deficient in most aspects of the job search process. They received very detailed instruction in job search skills, interviewing techniques, establishing employment contacts, enumerating personal

strengths and weaknesses, and identifying employment goals.

2. Occupational Training

In contrast to JSA, occupational training programs are longer in duration and designed to provide individuals with a specific occupational skill. These programs reflect the premise that participants have limited, if any, vocational skills. Participants in OT programs were offered an array of different types of training. As shown in Table 4-3, the largest proportion received training in clerical skills (29.6 percent). Machine and electronics training also accounted for large shares of participants, enrolling 10.1 percent and 9.2 percent of all individuals, respectively, while training in areas such as computer, health, machine and transportation related occupations was offered less frequently.

In addition to identifying the major types of services received by participants, it is important to examine the nature of program participation since it more accurately reflects the comprehensive service strategy of the local delivery system. Information on the duration of participation as well as the combinations of programs offered to participants can be useful for determining how existing strategies can be improved in the future. Table 4-4 shows the distribution of OT participants who participated in two or more activities by the activity in which they participated. As can be seen, the vast majority of participants received only one service, while 22 percent participated in at least one activity prior to enrolling in an OT program (column one, 576/2594) and 7 percent in at least two activities (column two 196/2594). In addition to participating in more than one OT skill area, individuals also participated in such pre-vocational activities as adult work experience, adult basic education and english as a second language. This information reveals the limited nature of program sequencing and may serve as the basis for identifying major strengths and weaknesses of local programming efforts.

The average duration of participation in an OT program was 18 weeks. This contrasts with the 6 week average length of participation in the JSA programs. Additionally, JSA participants did not always receive full-time services. In the OT

Table 4-3: Occupational Training Program Participants By Skill Training Area

Skill Training Area	Number	Percent
Clerical Related	769	29.6
Electronics Related	240	9.2
Health Related	144	5.5
Metal Related	77	3.0
Auto and Engine Related	93	3.6
Food Preparation Related	82	3.2
Machine Related	261	10.1
Computer Related	66	2.5
Printing Related	66	2.5
Maintenance Related	38	1.5
Carpentry Related	54	2.1
Transportation Related	3	0.1
Cosmetic Related	2	0.1
Accounting/Bookkeeping	91	3.5
Other	608	23.4
Total	2594	100.0

Table 4-4: Second and Third Most Recent Programs of Occupational Training Program Terminees

Second and Third Most Recent Activities	Second Most Recent Activity for Participants in at Least Two Programs		Third Most Recent Activity for Participants in at Least Three Programs	
	Number	Percent	Number	Percent
Occupational Training	104	18.0	17	8.7
On-the-Job-Training	14	2.4	4	2.0
Adult Work Experience	99	17.2	46	23.5
Adult Basic Education	109	18.9	22	11.2
GED Preparation	47	8.1	13	6.6
Job Search Assistance	17	2.9	2	1.0
Assessment and Orientation	101	7.5	75	38.6
English As A Second Language	54	9.4	8	4.1
Special Programs	6	1.0	5	2.5
Public Service Employment	21	3.6	3	1.5
Youth Programs	4	0.7	1	0.5
Total	576	100	196	100

programs, however, participants attended on at least a half-time and, in some cases, a full-time basis. Thus, the 18 week average length of program attendance means that OT program participants receive substantially more than three times the amount of training services received by JSA participants.

B. Data Collection and Participant Characteristics

The data used in the analysis that follows have been assembled by the Massachusetts Department of Manpower Development (DMD) as part of a state-wide effort to enhance the follow-up capabilities of prime sponsors. Each prime sponsor undertakes a six-month follow-up survey of participants who terminate from its Title IIB programs. Data collection procedures used are generally consistent across all sponsors and rely upon the telephone to contact terminees six months after termination from a program. Once follow-up data have been collected, each prime sponsor produces an analysis of post-program performance and, on a periodic basis, transmits local data to the state for the purpose of establishing a state-wide data base. This data base is used to conduct state-wide analyses of the effectiveness of the CETA program.

This section provides an overview of data collection procedures and the characteristics of those included in the study population. The usefulness of the analysis is that it provides a basis for gaining insights into the nature of those participants to be studied and judging the quality and representativeness of the follow-up data.

There were 6,869 individuals who participated in and terminated from JSA and OT programs. Of these individuals, 25.8 percent participated in JSA programs and 74.2 percent in OT programs. As shown in Table 4-5, there are large differences between the characteristics of participants in both programs. JSA participants were older and presumably more experienced than the participants in OT. Also, JSA participants were more educated, as 41 percent completed 13 or more years of education compared to 10 percent of the OT participants. A significantly larger proportion of

Table 4-5: Distribution of Participants by Program and Demographic Characteristics

	Job Search Assistance		Occupational Training		Total	
	Number	Percent	Number	Percent	Number	Percent
ALL PARTICIPANTS	1770	25.8	5099	74.2	6869	100.0
AGE[a]						
16-19	187	10.9	771	16.4	958	14.9
20-24	524	30.5	1555	33.0	2079	32.4
25-44	789	45.9	1998	42.5	2787	43.4
45 and over	210	12.7	382	8.1	600	9.3
EDUCATION[a]						
8 and below	142	8.0	505	9.9	647	9.4
9-11	280	15.8	1697	33.3	1977	28.8
12	613	34.6	2377	46.6	2990	43.5
13 and over	735	41.5	520	10.2	1255	18.3
SEX[a]						
Male	980	55.5	2354	46.3	3334	48.7
Female	787	44.5	2727	53.7	3514	51.3
RACE[a]						
White	1321	74.8	3106	61.2	4427	64.7
Black	291	16.5	1151	22.7	1442	21.1
Other	155	8.8	821	16.2	976	14.3
AFDC[a]						
Yes	73	4.1	735	14.4	808	11.8
No	1697	95.9	4364	85.6	6061	88.2

[a]Significant at the 1% level

males and whites participated in JSA relative to OT, and a larger proportion of AFDC recipients was selected for OT. Across both programs, participants tended to be 25 to 44 years of age, female, white, not receiving AFDC, and classified as having completed at least twelve years of education.

This pattern of program assignment should not be surprising. The JSA activity is designed primarily for those who are identified as "job ready", while the OT activity is designed for individuals who possess significantly greater barriers to employment. Since OT participants appear to be more disadvantaged, the observed distribution of participant characteristics across the programs would seem reasonable. Whether, and to what extent, these differences influence the outcomes of both programs is an important issue and will be discussed later in the chapter.

The ability to contact and interview these terminees varied by both their characteristics and program of termination. Of the 6,869 participants, 57 percent were contacted and 53 percent were successfully interviewed. For JSA participants, 65 percent were contacted and 58 percent interviewed. The results for OT participants showed a contact rate of 54 percent and a completed interview rate of 51 percent. These differences reveal the uneven representation of JSA and OT participants in the follow-up population and may produce some bias in the follow-up data.

Table 4-6 shows major reasons why former participants were either not contacted or not successfully interviewed upon contact. Problems with telephone numbers acquired from the local MIS accounted for 26.9 percent of all reasons for the absence of follow-up data (rows one and two in the table). In contrast, while information was available for 38.6 percent of the non-respondents, (top five rows in the table), changes in their phone numbers and addresses prohibited a follow-up interview. That participants typically will respond to an interview once contacted is shown by the fact that only 9.3 percent of these non-respondents refused to participate in the follow-up survey. The group of non-respondents who refused to answer constitutes only 3 percent of the <u>total</u> population of terminees.

Table 4-6: Reason For Not Completing Interview
(N=2403)

Reason Not Completing Interview	Number	Percent
No Phone Number at Intake	434	11.0
Incorrect Phone Number at Intake	381	15.9
Disconnected Phone	325	13.5
Unpublished Phone Number	169	7.0
Moved: Address Unknown	435	18.1
Participant Refused to Answer	223	9.3
Language Problem	61	2.5
Could Not Contact	545	22.7
Total	2403	100.0

The category "could not contact" is a residual classification that includes instances which arose during the follow-up survey but were too small in number to warrant a separate listing. This category represented 22.7 percent of all reasons for non-response and included such things as incarceration, hospitalization, enlistment in the military and continual absence from the home when contact was attempted. Additionally, if participants could not be contacted or interviewed for more than one reason, they were also included in this category.

Table 4-7 shows program and demographic characteristics of participants who responded to the follow-up interview. The characteristics of the participants who responded tend to be similar to those of the entire population, although there were some differences. For the sample of respondents as a whole, as well as for respondents from JSA and OT programs separately, respondents tended to be older, better educated, female, white, and recipients of AFDC. These differences may produce some bias in the follow-up data, and should be kept in mind when judging the effectiveness of local programs.

C. An Analysis of Average Measures of Program Outcomes

This section provides illustrations of how the use of simple statistical techniques can provide important insights into the level and distribution of post-program performance. Table 4-8 shows that the hourly wage earned by terminees on their first and last or most current post-program job was essentially equal for the JSA and OT programs. The data also show that hourly wages are highly related to the age, education, sex, race, and AFDC status of former participants. The specific findings can be summarized as follows:

- Hourly wage rates tend to increase through the middle ages (up to 44 years of age), and then decline;
- Wage rates tend to increase as the level of education increases; and
- Hourly wage rates are higher for men than for women, as they are for whites and non-recipients of AFDC.

Table 4-7: Distribution of Respondents by Program and Demographic Characteristics

	Job Search Assistance		Occupational Training		Total	
	Number	Percent	Number	Percent	Number	Percent
ALL RESPONDENTS	1023	28.1	2616	71.9	3639	100.0
AGE[a]						
16-19	120	12.0	354	13.7	474	13.2
20-24	298	29.9	869	33.6	1167	32.6
25-44	448	44.9	1121	43.3	1569	43.8
45 and Over	131	13.1	244	9.4	375	10.5
EDUCATION[a]						
8 and Below	64	6.3	216	8.3	280	7.7
9-11	145	14.2	805	30.8	950	26.1
12	345	33.7	1292	49.9	1637	45.0
13 and above	469	45.8	303	11.6	772	21.2
SEX[a]						
Male	539	52.7	1056	40.5	1595	43.9
Female	484	47.3	1554	59.5	2038	56.1
RACE[a]						
White	813	79.6	1632	62.6	2445	67.4
Black	145	14.2	608	23.3	753	20.8
Other*	63	6.2	365	14.0	428	11.8
AFDC FEMALE HEAD OF HOUSEHOLD[a]						
Yes	42	4.1	421	16.1	463	12.7
No	981	95.9	2195	83.9	3176	87.3

[a]Significant at the 1% level

* Includes: Hispanic, American Indian, Alaskan Native, Asian and Pacific Islander

Table 4-8: Average Starting and Final Hourly Wage Rate, Average Weeks Employed in the Post-Program Period, and Percent Currently Employed by Program and Demographic Characteristics
(Number of Cases in Parentheses)

	Average Starting Hourly Wage Rate		Average Final Hourly Wage Rate		Average Weeks Employed		Percent Currently Employed	
ALL RESPONDENTS	3.97	(3087)	4.26	(3051)	20.0	(3227)	73.2	(3588)
PROGRAM								
Job Search Assistance	3.99	(870)	4.28	(858)	19.2	(883)[a]	73.6	(1009)
Occupational Training	3.97	(2217)	4.25	(2193)	20.3	(2344)	73.1	(2579)
AGE								
16-19	3.55	(417)	3.75	(414)[a]	18.9	(418)[a]	68.2	(465)[b]
20-24	3.91	(1010)	4.19	(991)	20.5	(1036)	74.4	(1153)
25-44	4.20	(1316)	4.52	(1307)	20.2	(1398)	74.3	(1548)
45-64	3.77	(302)	4.03	(298)	18.7	(332)	72.2	(370)
EDUCATION								
8 or less	3.54	(225)[a]	3.77	(224)[a]	17.9	(241)[a]	64.9	(271)[a]
9-11	3.75	(767)	4.02	(758)	18.6	(842)	66.1	(930)
12	3.92	(1425)	4.18	(1409)	20.7	(1462)	75.1	(1625)
13 and over	4.49	(670)	4.87	(660)	21.0	(682)	80.0	(762)
SEX								
Male	4.30	(1372)[a]	4.67	(1359)[a]	19.7	(1830)[c]	73.5	(1575)
Female	3.71	(1709)	3.93	(1686)	20.3	(1392)	72.9	(2007)
RACE								
White	4.02	(2067)[b]	4.31	(2046)[b]	19.7	(2137)	74.2	(2405)
Black	3.88	(644)	4.14	(629)	20.4	(684)	71.1	(748)
Other	3.90	(366)	4.19	(365)	20.4	(394)	71.1	(422)
AFDC FEMALE HEAD OF HOUSEHOLD								
Yes	3.68	(356)[a]	3.89	(354)[a]	17.5	(419)[a]	67.8	(456)[b]
No	4.01	(2731)	4.31	(2697)	20.3	(2808)	74.0	(3132)

[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level
Hourly wage rates measured in dollars per hour.

The characteristics of terminees not only influenced wages earned during the follow-up period, but also appeared to be related to changes in wages earned during that period. Those who are older and more highly educated registered greater gains in wage rates during the follow-up period than their younger and less educated counterparts. Moreover, males as well as non-AFDC recipients also outpaced their counterparts during the follow-up period, with gains of $.37 and $.30, compared to $.22 and $.19, respectively.

In addition to assessing the hourly wages earned by participants during the follow-up period, prime sponsors may also be interested to learn about the extent and stability of post-program employment. As shown in Table 4-8, the average duration of employment in the six month follow-up period was 20.0 weeks. Moreover, the data reveal that many of the expected relationships exist between weeks employed and selected demographic subgroups of the respondent population. Older, more educated terminees who were not receiving AFDC tended to work more often than their counterparts. Unlike the findings on hourly wages, however, terminees from OT programs worked significantly more weeks than their JSA counterparts. Although the absolute difference is small, the high level of statistical significance clearly suggests that this is not a spurious finding.

That JSA participants worked fewer weeks than their OT counterparts should be of some concern to the prime sponsor. Since JSA participants are expected to have marketable skills, one would also expect them to fare at least as well in the post-program period as OT individuals, whose levels of marketable skills are the primary focus of the program. In view of this finding, the prime sponsor may wish to take a closer look at its JSA program in order to determine the causes of this observed difference in performance.

Rather than utilizing the number of weeks of employment to assess post-program employment, prime sponsors might also wish to use the proportion of participants currently employed as an outcome measure. This measure is easy to construct and is relatively straightforward with respect to interpretation and use. Table 4-8 shows

that the expected relationships tend to exist between the percent currently employed and the various demographic subgroups. However, in contrast to average weeks of employment, there is no significant difference between the proportion of OT participants employed and the proportion of JSA participants employed. As described in Chapter two, this type of outcomes measure does not adequately capture the total post-program employment of terminees and, in view of the difference between it and that of weeks of employment, clearly demonstrates the disadvantage associated with its use.

The data in Table 4-8 show two important types of summary findings. First, certain types of participants benefited more than others in terms of hourly wages and post-program employment. This indicates a need to further examine the sources of these differences in order that they may be addressed in the future. Secondly, these data show that, on average, terminees' starting and final hourly wage rates did not differ with respect to their program of termination. It was also shown, however, that demographic characteristics of OT participants differed significantly from those of JSA participants. Since participants in the JSA program tended to have characteristics which lead to greater labor market success (that is, older, more educated), the prime sponsor may suspect that the use of simple averages obscured an accurate assessment of program effects. As discussed earlier, the JSA program is designed to serve a more "job ready" group of participants. As a result, these average measures of program outcome may be biased upward for the JSA program relative to the OT program.

To address this issue and provide insights into which of the two programs work best for selected population subgroups, the prime sponsor may wish to adopt an approach such as that shown in Table 4-9. This table presents the measures of program outcomes for the two programs controlling for differences in participant characteristics. As is evident from the data, this approach provides a more accurate appraisal of program performance. For instance, even though participants in the JSA activity are significantly older than those in OT, when only the 16-19 year old age group is examined, participants in OT earn significantly higher hourly

Table 4-9: Post-Program Outcomes by Program and Demographic Characteristics
(Number of Cases in Parentheses)

Program and Demographic Characteristics	Average Starting Hourly Wage Rate	Average Final Hourly Wage Rate	Average Weeks Employed	Percent Currently Employed
AGE				
16-19				
Job Search Asst.	3.28 (110)[a]	3.44 (108)[a]	18.4 (98)	68.1 (119)
Occup. Training	3.65 (307)	3.86 (306)	19.1 (320)	68.2 (346)
20-24				
Job Search Asst.	3.74 (258)[a]	4.01 (251)[a]	19.8 (265)[c]	73.1 (294)
Occup. Training	3.97 (752)	4.25 (740)	20.8 (771)	74.9 (859)
25-44				
Job Search Asst.	4.37 (379)[a]	4.71 (378)	19.8 (389)	77.8 (442)[b]
Occup. Training	4.13 (937)	4.45 (929)	20.4 (1009)	72.9 (1106)
45 and over				
Job Search Asst.	3.99 (101)[b]	4.25 (100)[b]	18.6 (110)[a]	66.4 (128)[b]
Occup. Training	3.66 (201)	3.92 (198)	19.7 (222)	75.2 (242)
EDUCATION				
Less than 8 years				
Job Search Asst.	3.12 (47)[a]	3.40 (47)[b]	15.0 (51)[a]	62.7 (59)
Occup. Training	3.65 (178)	3.87 (177)	18.7 (190)	65.6 (212)
9-11				
Job Search Asst.	3.44 (113)[a]	3.64 (111)[a]	16.8 (120)[a]	62.4 (141)
Occup. Training	3.80 (654)	4.09 (647)	18.9 (722)	66.8 (789)
12				
Job Search Asst.	3.70 (300)	3.92 (295)	18.8 (302)	70.6 (343)[b]
Occup. Training	3.98 (1125)	4.24 (1114)	21.1 (1160)	76.4 (1282)
13 and over				
Job Search Asst.	4.45 (410)	4.82 (405)	20.8 (410)	80.7 (466)
Occup. Training	4.53 (250)	4.96 (255)	21.3 (272)	81.1 (296)
SEX				
Male				
Job Search Asst.	4.06 (456)[a]	4.32 (453)[a]	19.2 (463)	73.1 (532)
Occup. Training	4.41 (916)	4.84 (906)	20.8 (929)	73.7 (1043)
Female				
Job Search Asst.	3.91 (414)[a]	4.23 (405)[a]	19.3 (420)[a]	74.2 (477)
Occup. Training	3.65 (1295)	3.83 (1281)	19.9 (1410)	72.5 (1530)
RACE				
White				
Job Search Asst.	4.05 (695)	4.34 (682)	19.5 (701)	74.4 (801)
Occup. Training	4.00 (1372)	4.29 (1364)	19.8 (1436)	74.1 (1604)
Black				
Job Search Asst.	3.75 (117)[c]	3.93 (117)[b]	17.1 (127)[a]	63.9 (144)[b]
Occup. Training	3.90 (527)	4.19 (512)	21.2 (557)	72.8 (604)
Other				
Job Search Asst.	3.77 (37)	4.25 (38)	20.2 (53)	85.5 (62)[a]
Occup. Training	3.92 (309)	4.18 (307)	20.5 (341)	68.6 (360)
AFDC FEMALE HEAD OF HOUSEHOLD				
Yes				
Job Search Asst.	3.93 (33)[b]	4.08 (33)	15.1 (37)[c]	57.1 (42)[c]
Occup. Training	3.65 (323)	3.87 (321)	17.7 (382)	68.8 (414)
No				
Job Search Asst.	3.99 (837)	4.29 (825)	19.4 (846)[a]	74.4 (2165)
Occup. Training	4.02 (1894)	4.32 (1872)	20.8 (1962)	73.9 (2165)

a Significant at the 1% level
b Significant at the 5% level
c Significant at the 10% level
Hourly wage rates measured in dollars per hour.

wage rates. Conversely, for the 25-44 year old and 45-and-over age groups, participants in the JSA activity earn significantly higher wage rages than OT participants. Table 4-9 also shows similar results with respect to education. In this case, when the level of education is held constant, it can be seen that for each level of education, participants in OT earn higher wage rates than participants in JSA programs.

While these findings reveal the generally superior wage producing performance of OT programs, there are instances when the JSA program produces higher hourly wage rates. For example, for those 45 years of age and over, participation in a JSA program leads to higher hourly wages than participation in an OT program. Similarly, when the sex of participants is held constant, women from the JSA program earn higher hourly wages than those from OT. This contrasts with the finding for men who appear to benefit more from participation in OT.

Similar types of analysis are shown in Table 4-9 with respect to weeks of post-program employment and the percent of former participants employed at follow-up contact. While little variation was seen with respect to the latter outcomes measure, significant differences did emerge between participants' level of education and weeks of post-program employment. For each level of education, OT participants worked significantly more weeks during the follow-up period than their JSA counterparts.

The above analysis clearly shows the usefulness of follow-up data in reviewing post-program performance. At the same time, however, the analysis shows the shortcomings of simple comparisons. When the distribution of participant characteristics is controlled for, otherwise unobserved differences in program performance become evident. While this is a useful approach, it is also quite cumbersome. Moreover, it does not control for additional potential differences in characteristics, such as those between young black women and young white women. Although additional tables can be constructed to accomodate even more detailed analysis, this may result in an analysis that is unwieldy and not readily interpretable. A prime sponsor with

access to automated data processing facilities may wish to consider using multiple regression analysis for a more precise measure of program outcomes. A brief description follows for those who may be interested.

D. Multiple Regression Analysis of Program Performance

The analysis and results of Table 4-9 have two major shortcomings. First, they do not make clear what the magnitude of the difference is in the performance of OT and JSA programs. While it may appear that OT is more effective than JSA, differences between zero and forty cents per hour for wage rates, and zero to three weeks for weeks of employment measures are observed. Second, the table shows results which hold constant only one variable at a time. The drawback to this approach is that all of the personal characteristics vary simultaneously across the two programs. To address these shortcomings, the prime sponsor may wish to use multiple regression analysis. To illustrate the use of this technique, the following regression equation is estimated:

$$W = a_0 + a_1 \text{ AGE1} + a_2 \text{ AGE2} + a_3 \text{ AGE3} + a_4 \text{ ED} + a_5 \text{ SEX} + a_6 \text{ RACE} + a_7 \text{ WEEKS EMPLOYED} + a_8 \text{ PROG}$$

This equation assumes that the hourly wage of former participants (W), is determined by their age, education, sex, race, weeks of employment in the six months prior to CETA, and program of participation. The variables which have been included in the equation have the following meanings:

- The age of the participant is included by the use of three variables:
  - AGE1 has a value of one if the participant is between 16-19, inclusive, and zero otherwise.
  - AGE2 has a value of one if the participant is between 20-24, inclusive, and zero otherwise.
  - AGE3 has a value of one if the participant is 45 or over, and zero otherwise.

The estimates of a_1, a_2 and a_3 therefore, measure the difference between the wage rates earned by participants in the three age groups listed here and participants in the 25-44 age group, the base group for comparison. Since individuals in the prime age group, 25-44, tend to have higher earnings than all others, the estimates of a_1, a_2 and a_3 should be negative.

- The variable ED represents the years of education completed by the participants. The coefficient a_4 measures the number of cents per hour more an individual earns on average for an additional year of education.

- SEX is a variable which has a value of one if the individual is a man and zero if a woman. The estimate of a_5, therefore, measures how much more per hour men earn than women.

- RACE is a variable which has a value of one if the individual is white, and zero otherwise. The estimate of a_6 measures how much more per hour whites earn over all others.

- WEEKS EMPLOYED measures the total number of weeks participants were employed in the six-month period prior to the program. The estimate of a_7 measures how much more per hour is earned for each additional week worked in the six months prior to the program.

- The variable PROG has a value of one if the individual particicipated in OT and zero for JSA participants. The coefficient a_8 measures the impact of participation in OT relative to JSA. It is the estimate of a_8 which is of most interest.

Table 4-10 presents the regression results with respect to the hourly wage earned on the first post-program job. The first column shows the estimate of the equation specified above. From this estimate, everything else equal, the following results emerge:

- Individuals aged 16-19 earn 57 cents less per hour than individuals aged 25-44. Individuals aged 20-24 earn 41 cents less per hour and individuals aged 45 and over earn 24 cents less per hour than this same base group (25-44);

- An additional year of education yields individuals an average wage advantage of 15 cents per hour;

- Males earn 49 cents per hour more than females;

- White participants earn 14 cents per hour more than all other participants;

- An additional week of employment in the year prior to the program leads to 0.3 cents per hour more; and

- Participants in an OT program earn 27 cents per hour more relative to those in a JSA program.

Table 4-10: Regression Analysis of Starting Hourly Wage Rate

	(1)	(2)	(3)	(4)
Age: 16-19	-37.0[a]	-35.5[a]	-36.2[a]	-36.3[a]
	(9.68)	(9.63)	(9.61)	(9.61)
Age: 20-24	-41.1[a]	-40.9[a]	-40.8[a]	-40.5[a]
	(6.82)	(6.81)	(6.79)	(6.80)
Age: 45+	-24.3[a]	-23.8[a]	-24.2[a]	-24.0[a]
	(9.86)	(9.84)	(9.82)	(9.82)
Years of Education Completed	14.8[a]	14.6[a]	14.8[a]	14.8[a]
	(1.35)	(1.35)	(1.35)	(1.35)
Sex	49.5[a]	49.9[a]	51.6[a]	51.3[a]
	(5.98)	(6.00)	(6.00)	(6.01)
Race	13.7[b]	13.7[b]	13.3[b]	13.6[b]
	(7.48)	(7.47)	(7.47)	(7.47)
Weeks Employed in Year Prior to Program	0.3[b]	0.3[b]	0.3[b]	0.3[b]
	(0.18)	(0.18)	(0.18)	(0.18)
Constant	183.7[a]	202.7[a]	171.2[a]	167.3[a]
	(19.47)	(20.95)	(23.0)	(23.8)
Occupational Training	27.2[a]	13.8[b]	19.7[b]	19.7[a]
	(6.60)	(7.92)	(8.11)	(8.13)
Length of Training: 12 or Fewer Weeks	-	-20.2[a]	-17.4[b]	-17.6[b]
		(8.14)	(8.16)	(8.16)
Length of Training: 24-36 Weeks	-	0.5	-0.4	-1.4
		(9.58)	(9.56)	(9.59)
Length of Training: More Than 36 Weeks	-	9.01	6.15	6.22
		(11.43)	(11.43)	(11.44)
Completed	-	-	27.6[a]	-
			(8.47)	
Not Completed and Placed	-	-	-	10.1
				(13.22)
Completed and Not Placed	-	-	-	23.0[b]
				(13.67)
Completed and Placed	-	-	-	34.1[a]
				(11.21)
$\bar{R}^2$	0.13	0.13	0.14	0.14
F	34.8[a]	26.3[a]	25.1[a]	21.7[a]
Degrees of Freedom	8/1806	11/1803	12/1802	14/1800
(N=1813)				

[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level
Standard errors of coefficient estimates in the parenthesis. Unit of measurement is cents per hour.

Based upon these findings, it would appear that the independent effect of being a participant in an OT program is 27 cents per hour. However, since OT is a much longer activity than JSA, it is not clear whether the relatively positive effect of the program is due to the length of training per se, or to an inherent advantage of the OT program. To examine this issue, an additional variable has been added to the equation. This variable measures the number of weeks each individual participated in a program in the following manner:

- o Length of Training: 12 or Fewer Weeks has a value of one if the participant was in the activity for 12 or fewer weeks, and zero otherwise.
- o Length of Training: 24-36 Weeks has a value of one if the participant was in the activity for 24-36 weeks, and zero otherwise.
- o Length of Training: More than 36 Weeks has a value of one if the participant was in the activity for more than 36 weeks, and zero otherwise.

The estimate of the coefficient on each of these terms measures the difference between the wage rates earned by participants who are in one of these three groups and those who participated for between 13 and 23 weeks as the base group for comparison. The results of adding the variables to the first equation are presented in column two of Table 4-10.

As can be seen, the effects of participant characteristics are nearly identical to those obtained from the first estimation. However, the estimate of the effect of the OT relative to the JSA program has declined substantially to 15 cents per hour. The reason for this decline is that participants in OT were in the program for a much longer period of time than participants in the JSA program. Thus, without the length of training variables, the program variable captures the effect of both the number of weeks a participant was in an activity and the effect of being in OT relative to JSA. When these variables are entered separately, everything else equal, participants in OT earn 20 cents less per hour in comparison to those who participated for 13 to 23 weeks. For those participants who were in an activity for 24 or more weeks, additional weeks of program participation did not add to their starting hourly wage rate relative to those who participated for 13 to 23 weeks.

Although there appears to be a positive relationship between earnings and duration of training, the fact that increasing levels of program participation beyond 23 weeks did not add to earnings should be of some concern to prime sponsors. It could be that the longer training programs were not well designed or that the longer programs offered training in the slower growing occupations. Alternatively, since the duration variable reflects a composite of all training efforts, it could be capturing the effects of either one or two longer programs, or certain individuals who remained in a program the longest but did not perform well. Prior to making final judgements of this finding, prime sponsors should, therefore, examine the reasons for its occurrence if well directed efforts at program improvement are to be accomplished.

In addition to considering the duration of program participation, the prime sponsor will undoubtedly be aware that those participants in OT whose length of training is brief are most likely those who dropped out and did not complete the activity. Since these participants may also earn significantly lower starting hourly wage rates, it is necessary to control for participants' completion status. To accomplish this, an additional variable was added to the equation specified above. The variable has a value of one for an individual who completed the activity and a zero otherwise. When the equation is re-estimated, column 3 of Table 4-10 shows that, holding all else constant, program completion is important and leads to a 28 cents per hour wage advantage. Also, controlling for their completion status, participants in OT earn 20 cents per hour more than participants in JSA after controlling for personal characteristics and the length of the training.

The prime sponsor may also be interested in the potential influence of job placement on participants' starting hourly wage rates. Immediate placement in an unsubsidized job holds a unique position in the evaluation of prime sponsor programs. On the one hand, a placement is an outcome of an activity. When viewed from such a perspective, variations in the placement variable would be explained by many of the demographic and program characteristics which have been employed thus far. On the

other hand, placement is also a variable which can be used to explain why some participants earn a higher starting hourly wage rate and others do not. It is this latter approach which is used here.

To examine the potential impact of placement and still control for completion status, four categories were created. These categories cover participants who:

- Were not placed and did not complete;
- Were placed and did not complete;
- Were not placed and completed; and
- Were placed and completed.

Since individuals in each of the latter three categories experienced more positive immediate program outcomes, it is anticipated that they will fare better than the base group (those who did not complete and were not placed). Column 4 of Table 4-10 shows that the effects of personal characteristics on the first hourly wage remain similar in magnitude to those of previous equation estimates. The effect of participation in OT relative to JSA is 20 cents per hour, also similar to that in the previous equation estimate. For individuals who participated 12 or fewer weeks, as in the previous equation, 18 cents less per hour is earned relative to those who participated for 13 to 23 weeks.

Estimates of the coefficients on each of the three newly created variables are, as expected, positive. However, the estimate of the coefficient on the variable for those who were placed but did not complete is not significantly different from zero. This shows that those who did not complete but were placed do not earn significantly higher starting hourly wage rates than those who did not complete and were <u>not</u> placed. For individuals who completed the program, whether or not they were placed, higher starting hourly wage rates are earned. These findings, therefore, indicate that completion of an activity may very well be a more important determinant of the hourly wage rate on the first post-CETA job than immediate job placement.

The results shown thus far have concentrated on the starting hourly wage rate of the first post-CETA job. The prime sponsor may also wish to estimate the same set of equations for the wage earned on the last or current post-CETA job. Results for the estimation of such an equation are presented in Table 4-11. As can be seen, estimates of the coefficients of participant characteristics are very similar to those shown in the previous table. The actual values of the coefficients are, however, somewhat larger, due principally to the fact that the average final hourly wage rate is $4.26, while the average starting hourly wage rate is $3.97. For the program variables, the same basic patterns are shown in Table 4-11 as were shown in the previous analysis. There are, however, two important differences. First, the effect of the OT program relative to the JSA program is now only 13 cents per hour as opposed to 20 cents per hour for the hourly wage rate on the first post-CETA job. This represents approximately a 35 percent reduction in program effectiveness over a six-month period. The second difference from the previous results is the appearance of a more important role for immediate job placement. Relative to those who were not placed and did not complete, the findings show that those who were placed and did not complete as well as those who were placed and completed earned 39 and 41 cents per hour more, respectively. Those who completed but were not placed earned 23 cents per hour more. Thus, both completion and placement play an important role. However, placement is somewhat more important as shown by the 41 cents per hour more earned by those who were placed and completed relative to the 23 cents per hour more earned by those who were not placed but completed. Over time, one's placement status becomes more important in influencing wages, while at the time of termination, completion is the more influential of the two.

In addition to analyzing hourly wage rates, prime sponsors may also wish to use regression analysis to examine weeks of employment in the post-program period. An equation similar to that presented above is in Table 4-12 for the total weeks of post-program employment. This equation, however, includes only those terminees

Table 4-11: Regression Analysis of Final Hourly Wage Rate

	(1)	(2)	(3)	(4)
Age: 16-19	-63.0[a] (11.55)	-63.3[a] (11.54)	-63.8[a] (11.54)	-63.8[a] (11.52)
Age: 20-24	-44.3[a] (8.21)	-44.1[a] (8.19)	-44.0[a] (8.18)	-42.8[a] (8.18)
Age: 45+	-25.1[b] (11.85)	-24.8[b] (11.83)	-25.2[b] (11.82)	-24.7[b] (11.80)
Years of Education Completed	16.3[a] (1.62)	16.0[a] (1.61)	16.1[a] (1.62)	16.0[a] (1.61)
Sex	59.8[a] (7.19)	60.4[a] (7.19)	61.6[a] (7.22)	61.1[a] (7.21)
Race	14.3[c] (9.01)	14.3[c] (8.99)	15.8[b] (9.01)	16.2[b] (9.00)
Weeks Employed in Year Prior to Program	0.4[b] (0.21)	0.4[b] (0.21)	0.4[b] (0.21)	0.4[b] (0.21)
Constant	186.9[a] (23.3)	215.0[a] (25.1)	192.6[a] (27.6)	176.7[a] (28.4)
Occupational Training	27.7[a] (7.95)	9.4 (9.51)	13.6[c] (9.74)	12.5[c] (9.79)
Length of Training: 12 or Fewer Weeks	-	-29.9[a] (9.75)	-27.9[a] (9.79)	-28.3[a] (9.78)
Length of Training: 24-36 Weeks	-	-3.8 (11.53)	-4.5 (11.52)	-6.8 (11.54)
Length of Training: More than 36 Weeks	-	8.2 (13.68)	6.1 (13.72)	6.0 (13.70)
Completed	-	-	19.8[b] (10.1)	-
Not Completed and Placed	-	-	-	39.3[b] (18.09)
Completed and Not Placed	-	-	-	22.8[c] (16.4)
Completed and Placed	-	-	-	41.4[a] (13.40)
$\bar{R}^2$	0.12	0.12	0.12	0.13
F	31.09[a]	23.90[a]	22.28[a]	19.68[a]
Degrees of Freedom	8/1783	11/1780	12/1779	14/1777

(N = 1792)

[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level
Standard Errors of coefficient estimates in the parenthesis. Unit of measurement is cents per hour.
[d]A one tail test of the hypothesis that the coefficient is equal to zero, is rejected at the 10.05% level.

Table 4-12: Regression Analysis of Total Weeks Worked

	(1)	(2)	(3)	(4)	(5)
Age: 16-19	-1.29 (1.81)	-1.09 (1.80)	-1.14 (1.80)	-1.18 (1.80)	-1.10 (1.77)
Age: 20-24	-0.32 (1.14)	-0.42 (1.13)	-0.28 (1.13)	-0.36 (1.13)	-0.19 (1.11)
Age: 45+	-0.36 (0.42)	-0.31 (0.42)	-0.29 (0.42)	-0.28 (0.42)	-0.29 (0.41)
Years of Education Completed	0.31[a] (0.08)	0.21[a] (0.08)	0.21[a] (0.08)	0.22[a] (0.08)	0.21[a] (0.08)
Sex	0.14 (0.35)	-0.16 (0.35)	-0.20 (0.36)	-0.13 (0.36)	-0.20 (0.35)
Race	0.13 (0.42)	0.02 (0.42)	0.04 (0.42)	0.10 (0.42)	0.17 (0.41)
Weeks Employed in Year Prior to Program	0.03[a] (0.01)	0.03[a] (0.01)	0.03[a] (0.01)	0.03[a] (0.01)	0.02[b] (0.01)
Constant	16.62[a] (1.12)	15.60[a] (1.13)	16.33[a] (1.22)	15.14[a] (1.35)	13.48[a] (1.37)
Occupational Training	2.05[a] (0.38)	1.91[a] (0.38)	1.42[a] (0.45)	1.64[a] (0.47)	1.53[a] (0.46)
Number of Dependents	0.017 (0.15)	-0.06 (0.15)	-0.05 (0.15)	-0.04 (0.15)	-0.04 (0.14)
Aid to Families with Dependent Children	-1.20[a] (0.51)	-1.07[b] (0.51)	-1.07[b] (0.51)	-1.06[b] (0.51)	-0.98[b] (0.50)
Starting Hourly Wage Rate for First Post-CETA Job	-	0.006[a] (0.001)	0.006[a] (0.001)	0.006[a] (0.001)	0.006[a] (0.001)
Length of Training: 12 Or Fewer Weeks	-	-	-0.70[c] (0.46)	-0.39[c] (0.46)	-0.66[c] (0.45)
Length of Training: 24-36 Weeks	-	-	0.47 (0.54)	0.45 (0.54)	0.16 (0.53)
Length of Training: More than 36 Weeks	-	-	-0.31 (0.64)	-0.41 (0.64)	-0.43 (0.63)
Completed	-	-	-	1.00[b] (0.49)	-
Not Completed and Placed	-	-	-	-	4.13[a] (0.86)
Completed and Not Placed	-	-	-	-	0.19 (0.78)
Completed and Placed	-	-	-	-	3.53[a] (0.64)
$\bar{R}^2$	0.027	0.04	0.04	0.04	0.08
F	5.427[a]	7.16[a]	5.99[a]	5.88[a]	9.14[a]
Degrees of Freedom	10/1591	11/1590	14/1587	15/1586	17/1584

(N=1602)

[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level
Standard errors of coefficient estimates in the parenthesis. Unit of measurement is weeks.

who worked after the program.

Many of the variables included in this equation are similar to those used earlier. One new variable which was introduced, however, is the hourly wage rate on the first post-CETA job. This variable is an important element of this equation because it is generally thought that as participants' wages increase, everything else equal, they will be willing to work more. The number of dependents is also included because even if two individuals receive the same wage rate, the individual with the larger number of dependents may tend to work less due to home care responsibilities. Similarly, individuals eligible to receive AFDC may also tend to work less, due to the incentive structure of the program, even if they receive the same wage rate as those not eligible for AFDC.

Table 4-12 shows the results of this series of equations. The first version of the equation is presented in column one. The findings show that as education and weeks employed in the year before the program increase, weeks employed in the post-program period increase as well. The estimate also shows that, as hypothesized, AFDC recipients work less than non-recipients. Also, participants in the OT program work, on average, two weeks longer than participants in the JSA program. In the second column of the table, the starting hourly wage rate is added as an independent variable. The only major difference in the second equation from the first is that the magnitude of the coefficient estimates has been reduced.

Having identified an initial version of the weeks of employment equation in column 2 which adequately explains the employment experience of the participants, the prime sponsor may wish to study further effects of the program by adding the length of training and the completion status of participants. As shown in column 3 of Table 4-12, individuals who participate in activities for brief periods tend to work less, on average, than those who participate for 13 to 23 weeks.

As was indicated in the discussion of the hourly wage rate equations, however, these results may be somewhat misleading in that some of those who participated for the briefest time period may not have completed the program and, thus, may not have

obtained a full set of services. Therefore, the estimate in column 3 that participants in OT work 1.4 weeks longer than participants in JSA may be too low. To remedy this problem, column 4 presents an equation which includes the completion variable. It shows that participants who complete an activity work one week longer than those who do not complete. Also, this version of the equation shows that participants in the OT program work one and two-thirds weeks longer than participants in the JSA program, greater than that observed in the third equation.

Finally, the prime sponsor may want to study the effect that placement has on employment. To do this, the variables which measure completion and placement status that were employed in the wage rate equations are used here also. Column 5 shows the estimate of the equation with these variables included. There are two noteworthy results. First, those individuals who completed and were placed and those who did not complete but were placed worked significantly more weeks than those who were not placed, independent of whether they completed or not. This shows the importance of placement in positively influencing post-program employment, and is in contrast to the findings on the first post-program wage rate. Second, participants in OT tend to work one and a half weeks more than participants in JSA programs.

These findings have clear implications for the prime sponsor. First, the findings show the usefulness of multiple regression analysis in isolating the effects of participation in a program. Secondly, they reveal that, independent of the characteristics of those reviewed, occupational training programs are significantly more effective than job search assistance programs. While this particular finding may not be relevant to any one sponsor, it does clearly show how follow-up data can assist in making program mix decisions. Third, the findings show that, regardless of the program, certain groups of the enrollee population will not benefit as much as others. This is the case, for instance, with women, AFDC recipients, and those with limited prior work histories. With these findings, prime sponsors would be well equipped with valuable information to use as the basis for further exploring the issue of what works best for whom, and why. Finally, these findings indicate

the need to carefully specify all aspects of program participation since the duration of participation as well as the completion and/or placement status has an important influence on each of the outcomes measures. It is important not to treat program participation in an aggregated fashion, but to provide information on specific areas of programs that may warrant special attention.

E. Skill Training Areas and Measures of Program Outcome

The results which have been presented thus far have been of an aggregate or a summary nature. While they are useful for determining where, and in many cases, how programs can be improved, the prime sponsor may also want a more detailed examination of why program outcomes differ between OT and JSA participants. Table 4-13 represents one way to address this issue, showing each of the four outcome measures by individual skill training area. As can be seen, substantial differences exist between the individual training programs. Among skill training areas with higher hourly wage rates and weeks of employment are computer, machine, metal and electronics related training, all of which have higher hourly wages and levels of employment than those produced by the JSA programs. These results partly explain the source of the post-program wage advantage experienced by OT participants. The results also clearly show the importance of the occupational selection process in influencing post-program performance. With this information, prime sponsors would be in a better position to take those steps necessary to improve local performance.

F. Participants Not Employed at the Time of the Interview

An additional way to gain further insights into the results obtained thus far is to examine the qualitative aspects of terminees' post-program labor market experiences. For example, although earlier findings revealed that 73 percent of the terminees were employed at follow-up contact, information on the status of the remaining 27 percent can be useful for identifying those aspects of program design requiring improvements. Table 4-14 shows that approximately 60 percent of those

Table 4-13 Starting and Final Hourly Wage Rate by Skill Training Area for Occupational Training (N=2196)

Training Activity	Starting Hourly Wage Rate[a]	Final Hourly Wage Rate[a]	Weeks Employed[a]	Percent Currently Employed[a]	Percent
Total	3.94	4.21	20.2	72.0	100.0
Clerical Related	3.56	3.76	20.7	75.0	29.7
Electronics	4.20	4.54	21.8	77.5	10.0
Health Related	3.75	3.90	19.5	67.4	5.3
Metal Related	4.72	5.12	22.0	63.6	3.1
Auto and Engine	3.63	3.88	21.4	66.7	3.9
Food	3.44	3.61	17.0	58.5	3.0
Machine	4.66	5.28	23.0	83.5	10.9
Computer	5.57	5.87	23.7	83.3	2.4
Printing	3.60	3.83	21.2	78.8	2.7
Maintenance	4.50	5.06	20.7	68.4	1.5
Carpentry	4.13	4.11	16.2	64.8	2.0
Accounting	3.35	3.41	16.0	52.2	3.2
Other	3.94	4.17	18.6	67.9	22.4

[a]Significant at the 1% level

Hourly wage rates measured in dollars per hour.

Table 4-14: Participants Currently Looking for Work and Methods Used to Seek Work and Participants Not Currently Looking for Work and Reasons for no Job Search

	Occupational Training		Job Search Assistance		Total	
	Number	Percent	Number	Percent	Number	Percent
All Respondents	626	71.5	250	28.5	876	100.0
Currently Looking for Work	358	57.2	157	62.8	515	58.8
Currently Not Looking for Work	268	42.8	93	37.2	361	41.2
Methods Used to Seek Work						
Training Agency	15	4.2	7	4.6	22	4.3
DES	27	7.6	13	8.5	40	7.8
Private Agency	13	3.6	8	5.2	21	4.1
Friend	20	5.6	4	2.6	24	4.7
Newspaper	216	60.5	87	56.9	303	59.4
Walk-in	50	14.0	17	11.1	67	13.1
School	1	.3	3	2.0	4	.8
Other	15	4.3	14	9.2	29	5.7
Reasons for Not Looking for Employment						
Inadequate Training/Skills	7	2.7	3	3.3	10	2.8
Unsure of Myself	3	1.1	-	-	-	.8
Personal Problems/Health	48	18.3	16	15.2	64	18.0
Child Care/Pregnancy	83	31.7	6	6.5	89	25.0
Tired of Looking	7	2.7	4	4.3	11	3.1
Other	114	43.5	65	70.7	179	50.3

who were not employed at follow-up contact were looking for work at the time of the interview. The table also shows that of those individuals who were looking for work, 60 percent of the OT participants and 57 percent of the JSA participants were using the newspaper as the major source for finding work. In addition, 14 percent of the OT participants and 11 percent of the JSA participants were simply walking into firms to identify job openings. While these methods may be an effective approach for some, more sophisticated methods could be used, especially by JSA participants who had recently received training in job seeking techniques. While such a finding is not necessarily critical of the JSA program, it should cause the prime sponsor to carefully examine the program. Such an examination should include a careful review of the types of job seeking techniques participants are being taught.

Finally, Table 4-14 also shows several reasons why non-employed participants are not looking for work. Child care/pregnancy is one of the reasons which appears frequently. This result should be viewed in conjunction with the demographic characteristics shown in Table 4-15. This table shows that the distinguishing demographic characteristic between those looking for work and those not looking for work is that nearly 70 percent of those not looking are female, whereas only 46 percent of those looking are female. Therefore, the prime sponsor may want to take a more careful look at the availability of child care facilities. It may be the case that many women find it necessary to leave the labor market due to the lack of satisfactory child care arrangements.

This analysis of follow-up data has provided several illustrations of how follow-up data can be used in a simple and then more sophisticated manner to assess program performance. Although it does not reflect all the possible ways that follow-up data can be used for local planning purposes, it does provide a first step for those prime sponsors interested in examining the post-program performance of their local employment and training programs.

Table 4-15: Distribution of Participants Not Currently Working By Demographic Characteristics

	Looking		Not Looking	
	Number	Percent	Number	Percent
ALL RESPONDENTS	515	58.8	361	41.2
AGE				
16-19	82	15.3	58	15.5
20-24	153	29.1	113	30.7
25-44	211	40.5	147	40.1
45 and over	66	12.2	41	10.8
EDUCATION				
8 and less	57	11.1	28	7.8
9-11	171	33.2	116	32.1
12	211	41.0	157	43.5
13 and over	76	14.8	60	16.6
SEX[a]				
Male	277	53.8	109	30.2
Female	238	46.2	252	69.8
RACE				
White	347	67.5	217	60.3
Black	112	21.8	95	26.4
Other	55	10.7	48	13.3
AFDC				
Yes	58	11.3	71	19.7
No	457	88.7	290	80.3

[a]Significant at the 1% level

FOOTNOTES TO CHAPTER FOUR

1. Officially, the Department of Labor calculates the rate of job placement as follows:

$$\frac{\text{Number of Job Placements}}{\text{Total Terminations - Intertitle Transfers}} \times 100$$

2. This does not mean, however, that placement into unsubsidized employment will lead to gains in long-term employment and earnings. The degree to which job placement is a reliable predictor of gains in post-program earnings is yet an unresolved empirical issue. For a review of existing evidence see:

   Borus, Michael, "Indicators of CETA Performance", Industrial and Labor Relations Review, Volume 32, No. 1, October, 1978, pp. 3-14.

   Gay, Robert, Validating Performance Indicators for Employment and Training Programs, U.S. Department of Labor, Employment and Training Administration, Office of Research and Development, Washington, D.C., April, 1978.

   Geraci, Vincent, and Christopher King, Employment and Training (CETA) Program Performance: Long-Term Earnings Effects and Short-Term Indicators, University of Texas at Austin, Department of Economics, December, 1980.

3. For a more complete discussion of the issues related to the use of pre- and post-comparisons, see Chapter Two, Section II.A.

4. Tests between means (simple averages), are a useful statistical technique for outcomes expressed in continuous terms, such as hourly wage rates, weeks worked or earned income. Such outcome measures can be compared across any number of program strategies or population subgroup categories. A second technique which may be useful is contingency table analysis. This approach relies upon the cross-tabulation of two variables, typically a program outcome and a particular demographic or programmatic subgroup of the population, and allows prime sponsors, through the use of a "chi-square" statistic, to determine if a statistically significant relationship exists between the two variables.

5. For a review of the nature of job search assistance programs see:

   Wegman, Robert G., "Job Search Assistance: A Review", Journal of Employment Counseling, Volume 16, No. 4, December, 1979.

6. For 23.4 percent, the area in which training was received was unidentifiable. For about 75 percent of these participants, the area of training was not available from the Prime Sponsor MIS. For the remaining 25 percent, enrollment was in a particular training in which only a limited number of individuals participated.

7. This effort recently became part of a region-wide effort to develop the program evaluation capabilities of prime sponsors. The work has received joint funding from the Massachusetts State Employment and Training Council (SETC), individual prime sponsors, and the ETA, U.S. D.O.L. For complete documentation see:

Zornitsky, Jeffrey, Glen Schneider and John Dorrer; The Development and Use of Local Evaluation Systems: An Employment and Training Perspective (Prepared for: Office of Policy, Evaluation and Research, Employment and Training Administration, U.S. Department of Labor, Washington, D.C., September, 1980.)

Technical Appendices to Part II

A. W-2 Wage and Tax Statement

B. An Empirical Comparison of Alternative Survey Methodologies: Results of Employment and Training Administration Field Study

C. Telephone/Personal Visit Follow-Up Questionnaire

D. Mail Survey Follow-Up Questionnaire

E. Region One Follow-Up Evaluation Project Questionnaire

F. Participant Information Form

G. Sample Introductory Letters and Business Reply Postcards

H. A Review of Sampling Procedures

I. A Review of Costs of Operating Local Prime Sponsor Follow-Up Systems

APPENDIX A

W-2 Wage and Tax Statement, Copy A

1 Control number	22222								
2 Employer's name, address, and ZIP code			3 Employer's identification number				4 Employer's State number		
			5 Stat. employee ☐	Deceased ☐	Pension plan ☐	Legal rep. ☐	942 emp. ☐	Subtotal ☐	Correction ☐	Void ☐
			6 *				7 Advance EIC payment		
8 Employee's social security number	9 Federal income tax withheld		10 Wages, tips, other compensation				11 FICA tax withheld		
12 Employee's name (first, middle, last)			13 FICA wages				14 FICA tips		
			16 Employer's use						
			17 State income tax		18 State wages, tips, etc.		19 Name of State		
			20 Local income tax		21 Local wages, tips, etc.		22 Name of locality		
15 Employee's address and ZIP code									

Form **W-2 Wage and Tax Statement 1980** — Copy A For Social Security Administration • See Instructions for Forms W-2 and W-2P — Department of the Treasury Internal Revenue Service

Do NOT Cut or Separate Forms on This Page

1 Control number	22222								
2 Employer's name, address, and ZIP code			3 Employer's identification number				4 Employer's State number		
			5 Stat. employee ☐	Deceased ☐	Pension plan ☐	Legal rep. ☐	942 emp. ☐	Subtotal ☐	Correction ☐	Void ☐
			6 *				7 Advance EIC payment		
8 Employee's social security number	9 Federal income tax withheld		10 Wages, tips, other compensation				11 FICA tax withheld		
12 Employee's name (first, middle, last)			13 FICA wages				14 FICA tips		
			16 Employer's use						
			17 State income tax		18 State wages, tips, etc.		19 Name of State		
			20 Local income tax		21 Local wages, tips, etc.		22 Name of locality		
15 Employee's address and ZIP code									

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			6 *				7 Advance EIC payment		
8 Employee's social security number	9 Federal income tax withheld		10 Wages, tips, other compensation				11 FICA tax withheld		
12 Employee's name (first, middle, last)			13 FICA wages				14 FICA tips		
			16 Employer's use						
			17 State income tax		18 State wages, tips, etc.		19 Name of State		
			20 Local income tax		21 Local wages, tips, etc.		22 Name of locality		
15 Employee's address and ZIP code									

Form **W-2 Wage and Tax Statement 1980** — Copy A For Social Security Administration • See Instructions for Forms W-2 and W-2P — Department of the Treasury Internal Revenue Service

APPENDIX B

An Empirical Comparison of Alternative Survey Methodologies:
Results of Employment and Training Administration Field Study

AN EMPIRICAL COMPARISON OF ALTERNATIVE SURVEY METHODOLOGIES: RESULTS OF EMPLOYMENT AND TRAINING ADMINISTRATION FIELD STUDY

Introduction

For some years now, prime sponsor follow-up systems, as have been described in this Technical Assistance Guide, have been operating in many of the prime sponsors in Region I. As fiscal year 1982 begins, twenty-four of the twenty-five prime sponsors in the region are engaged in participant follow-up and their joint efforts constitute a regional evaluation system. The follow-up projects operated by each of the twenty-four prime sponsors generally employ the telephone interview method as a way of locating, contacting and interviewing participants. In fiscal year 1979, available data reveal that the telephone interview method has led to 57 percent of the terminees being contacted and 51 percent completing interviews. An interest arises out of this experience regarding the use and potential advantages of alternative follow-up survey methods, particularly in terms of the number of terminees who would be contacted and interviewed, the quality of the resulting data and the overall survey costs. In response to these issues, the Employment and Training Administration, U.S. D.O.L., recently funded a survey research study in Regions VI and VII to test alternative survey methods. The purpose of this appendix is to report on this study.

This appendix is composed of three sections. Section I is a discussion of the study's survey design. This design required that participants be randomly divided into three groups, each of which would be located and interviewed by one of three survey methods; telephone, personal visit or mail. Section II details the specific contact, location and interview strategies used in each of these three methods. Section III presents the findings of the study. These results are divided into five areas: 1) a review of the demographic characteristics of those participants included in the study; 2) a discussion of the magnitude of participant contact and interview completion rates; 3) a study of the determinants of the contact and completion rates; 4) a review of the quality of the collected data for each method; and 5) a presentation of the costs of using each method.

The results presented in Section III should be relevant to most prime sponsors. Figure B-1 presents the distribution of the ratio of population to land area for all prime sponsors; that is, population density. The figure shows that more than two-thirds of all prime sponsors encompass geographic areas that have fewer than 750 people per square mile. Four of the five prime sponsors included in this study have population densities in the same range. At the opposite end of the scale, 19 percent of all prime sponsors have population densities greater than 2,000 people per square mile. One prime sponsor included in this study has a population density in this range.

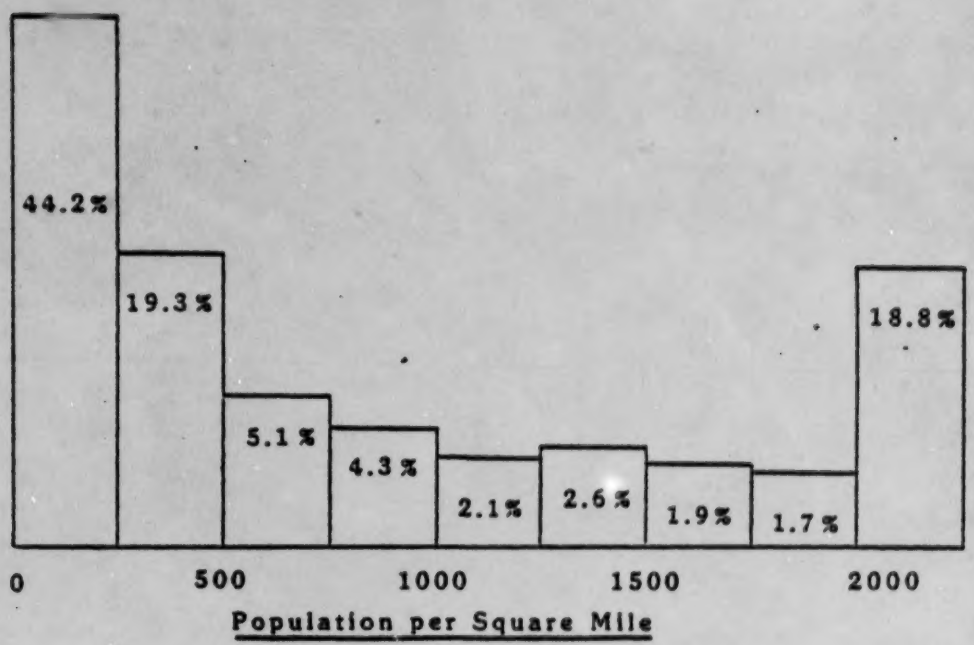
I. Survey Design

For this study, approximately 800 participants were chosen for follow-up. Of these participants, roughly half terminated from CETA Title II funded programs operated in Region VI and half from programs operated in Region VII. Based upon regional enrollment figures for Title II, the sample was designed so that 75 percent of the participants terminated from Title IIBC and 25 percent from Title IID. In precise terms, 784 participants were included in the follow-up sample. Of the 784 participants, 395 were individuals who participated in programs operated in Region VI and 389 participated in programs operated in Region VII.

The Region VI component of the research was undertaken by the Center for the Study of Human Resources of the University of Texas at Austin. As is shown in Table B-1, the participants included in the survey terminated during July and August of 1980 from Title II programs operated by the Capital Area Manpower Consortium and the Alamo Manpower Consortium.

The original intent of the study was to follow-up participants who terminated during August 1980 six months after their termination. However, the two prime sponsors involved in Region VI did not have sufficient numbers of August terminees between them to result in a satsifactory distribution. The Capital Area Manpower Consortium had 80 Title II terminees in August, and the Alamo Manpower Consortium

Figure B-1
Distribution of Population per Square Mile
by Prime Sponsor in 1980



Capital Area Manpower Consortium	85
Alamo Manpower Consortium	101
Kansas City Area Manpower Consortium	260
Balance of Jackson County	525
Independence City	2324

Table B-1: Distribution of Participants by Prime Sponsor, Month, and Title Subpart of Termination

	Region VI		Region VII					
	Capital Area Manpower Consortium	Alamo Manpower Consortium	Kansas City Area Manpower Consortium	Independence	Jackson County	Total	Percent by Month	Percent By Title Subpart
Title IIB/C								
June 1980	-	-	-	-	30	30	5.1	
July 1980	33	-	71	16	15	135	23.1	
August 1980	56	206	82	50	26	420	71.8	
Total for Title II B/C	89	206	153	66	71	585	100.0	74.6
Percent by Prime Sponsor	15.2	35.2	26.1	11.3	12.1	100.0		
Title IID								
July 1980	19	-	47	4	2	72	36.2	
August 1980	24	57	39	2	5	127	63.8	
Total for Title IID	43	57	86	6	7	199	100.0	25.4
Percent by Prime Sponsor	21.6	28.6	43.2	3.0	3.5	100.0		
Total	132	263	239	72	78	784		100.0
Percent by Prime Sponsor	16.8	33.5	30.5	9.2	9.9	100.0		

had 519. If a sample of 320 had been drawn from the Alamo Manpower Consortium and added to the 80 terminees from the Capital Area Manpower Consortium to make up the 400 terminees needed for the study, it was felt that the Alamo Manpower Consortium would have dominated any effects observed in the data. Instead, all 80 August terminees and all 52 July terminees were included in the sample for the Capital Area Manpower Consortium. Thus, a 100 percent sample of July and August terminees was taken for this prime sponsor. For the Alamo Manpower Consortium, 206 terminees were randomly selected from the 430 Title IIB terminees, and 57 terminees were randomly selected from the 89 Title IID terminees, resulting in a total sample of 395 individuals from Region VI. These final figures are reflected in Table B-1.

The second component of the study included 389 individuals who terminated from programs operated in Region VII. This component of the study was undertaken by Human Resources Data Systems, Inc. As is shown in Table B-1, the participants involved terminated during June, July and August of 1980 from Title II programs operated by the Kansas City Area Manpower Consortium, Independence, and Jackson County Prime Sponsors.

As was the case with Region VI, in Region VII there were not enough terminees in August 1980 to create a sample of sufficient size for the study. Therefore, all terminees from the month of July 1980 were included in the sample along with all the August terminees. In addition, 30 participants who terminated during June 1980 from programs operated by the Jackson County Prime Sponsor were included as well.

During January 1981, participant information was collected from the Management Information Systems (MIS) of the five prime sponsors. The Participant Information Form (PIF) contained in Appendix F was used for this purpose. All of the data elements listed on the PIF were sought for each participant. Once each of 784 participants included in the study was identified, and the PIF for the individual completed, the forms were placed in numerical order according to the identification numbers assigned to the participants by the prime sponsor. Those who were to be

interviewed by the telephone method were selected by choosing every third participant beginning with the first participant. Those who were to be interviewed by the personal visit method were selected by choosing every third participant beginning with the second participant. And finally, those participants who were to be part of the mail survey were selected by choosing every third participant beginning with the third participant.

Table B-2 presents four demographic characteristics for all of the participants selected for inclusion in the study, by contact method. From the table, it can be seen that, generally, the characteristics of participants in each of the subsamples are the same. While there is some variation across methods, the chi-square test of significance has been applied for each of the four characteristics, and, in every case, it has been concluded that there is no reason to reject the null hypothesis of independence at reasonable levels of significance. One place where some variation which is mildly disturbing does occur, is the education characteristic. For the total sample, 16 percent of the participants have completed 13 or more years of education. For the telephone subsample, 22 percent have achieved this level of education, whereas for the personal visit subsample, only 12.5 percent of the participants have the same level of achievement.

II. Location, Contact and Interview Strategies

At the end of January 1981, each participant included in the sample was sent a letter explaining the purpose of the upcoming interview and stressing its voluntary and confidential nature. Interviews were undertaken in February 1981 and used the telephone interview method, the personal visit interview method and the mail survey method. Each of these methods is outlined in this section.

Table B-2: Demographic Characteristics of Participants by Contact Method

	Telephone		Personal Visit		Mail Survey		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Age								
16-19	36	14.1	36	14.3	39	14.6	111	14.3
20-24	106	41.6	101	40.2	117	43.7	324	41.9
25-44	95	37.3	99	39.4	101	37.7	295	38.1
45-64	18	7.1	15	6.0	11	4.1	44	5.7
Total	255	100.0	251	100.0	268	100.0	774	100.0
Years of Education								
Less than 8	21	8.1	23	9.0	25	9.3	69	8.8
9-11	90	34.9	99	38.7	106	39.6	295	37.7
12	90	34.9	102	39.8	99	36.9	291	37.2
13 or more	57	22.1	32	12.5	38	14.2	127	16.2
Total	258	100.0	256	100.0	268	100.0	782	100.0
Sex								
Male	118	45.7	114	44.5	128	47.4	360	45.9
Female	140	54.3	142	55.5	142	52.6	424	54.1
Total	258	100.0	256	100.0	270	100.0	784	100.0
Race								
Black	91	35.3	91	35.5	107	39.6	289	36.9
White	93	36.0	91	35.5	85	35.5	269	34.3
Hispanic	69	26.7	73	28.5	72	26.7	214	27.3
Other*	5	2.0	1	0.4	6	2.2	12	1.5
Total	258	100.0	256	100.0	270	100.0	784	100.0

*Includes American Indian, Alaskan, Asian and Pacific Islander.

Telephone Interview Method

At the beginning of February, interviewers initiated the process of contacting and interviewing each of those participants who had been assigned to the telephone interview subsample. At the outset, interviewers called participants between 4:00 p.m. and 8:00 p.m. at the telephone numbers which were available from the prime sponsor MIS. The initial call led to one of two possible outcomes. First, in some cases, the participant was immediately contacted and was then asked to complete the interview. If it was not possible at that time for the participant to complete the interview, arrangements were made to call back at a time which was more convenient for the participant. Second, in many other cases, the participant was not immediately contacted and a variety of location and contact methods was then employed in an attempt to locate the participant.

The methods which were used to locate and contact members of the telephone interview subsample can be grouped into five categories. First, callbacks were made for a few consecutive evenings. If contact was not made, the participant was called back at various times during the day for a few consecutive days. Second, for those participants who had given the prime sponsor the name and telephone number of a friend or relative, the contact person was called in an attempt to ascertain the location of the participant. Third, when more current information was required, the local telephone directory was utilized, and, when necessary, directory assistance was also contacted. Fourth, when the prime sponsor MIS indicated that the participant had been job placed at termination, if the information was available, the employer with whom the participant was placed was contacted. In some cases, the participant was still employed by this employer and arrangements could be made to complete an interview. If the participant had left this employer, a forwarding address or telephone number was sought. Finally, a cross-listing city directory was used, when necessary, to identify neighbors who might know how to contact the participant.

One location and contact method which interviewers did not have the option of utilizing with the telephone interview subsample, was to actually travel to the most current address available for the participant. Interviewers were limited to location and contact methods which involved the use of the telephone as the primary resource and minimized the use of travel. Finally, it should be clear that if, at any point during the search process, a participant was located and contacted, an offer to complete an interview was made. If it was not then possible to complete the interview, arrangements were made to call back at a more convenient time. Telephone interviewers used the questionnaire contained in Appendix C.

Personal Visit Interview Method

For participants who had been assigned to the personal visit interview subsample, the procedures utilized to locate and contact the participants were virtually identical to those outlined for the telephone interview method. However, the personal visit interview method also had available to it an additional location and contact method. It was permitted for project staff to pursue a contact through field work. In other words, if a preliminary phone contact was not made, the interviewer could visit the address given by the participant. In cases in which participants were not located at the given address, the interviewers could use the opportunity to ask neighbors for potential leads as to the participants' whereabouts.

Aside from the additional search procedures, the personal visit interview method also provides that interviews be conducted in person. Thus, once the participant has been located and contacted by telephone, an appointment is made for a time when the interview can be administered. The in-person interview utilizes the same questionnaire as the telephone interview.

Mail Survey Method

For those participants who were assigned to the mail survey subsample, a cover letter and the survey instrument were sent to the most recent address recorded in the MIS, on or about January 26, 1981. As completed mail survey questionnaires were returned, each was reviewed to determine which responses were usable and which were not. It was then necessary to code the responses in a manner consistent with the coding of the telephone and personal visit interviews. For questionnaires which were returned and not completed because the questionnaire could not be delivered by the postal service, other location methods were employed. These methods included city telephone directories, cross-listing city directories, neighbors and employers. Interviewers, however, did not have the option of using two of the location and contact methods. That is, interviewers could not attempt to reach the participant by telephone or actually travel to the most current address available for the participant.

A second mailing was undertaken on or about February 13. Those participants who did not return completed questionnaires by that date, or whose questionnaires were returned as undeliverable but for whom new addresses had been obtained, were sent a second set of mail survey materials.

As each interview was completed, in both the telephone and personal visit methods, it was checked and coded by the interviewer. Each completed mail questionnaire was also reviewed and edited by the survey managers at each of the two sites. Finally, the data were entered into a computer system, cleaned, and then transmitted to the Massachusetts Department of Manpower Development.

III. Findings of the Field Work

This section presents findings regarding the use of each of the three survey methods. The discussion of the results is divided into five parts. First, the demographic characteristics of those participants who completed an interview are

presented. Second, the proportion of participants who were contacted by each method and the proportion of participants who completed interviews by each method are calculated. The location and interview strategies used in each method are analyzed to determine the reasons for some participants not having completed the interviews. Third, the determinants of the contact and completion rates are studied in detail. Initially, both contact and completion rates are broken down by demographic and program characteristics. This analysis is extended by employing multiple regression analysis to identify the separate effects individual demographic and program characteristics have on contact and completion rates. Fourth, the completeness and consistency of the data are examined for each of the three methods by identifying certain checkpoints within the questionnaires which allow for analysis to determine which of the methods led to the applicable sections and questions being completed most often. Fifth and finally, the costs of locating, contacting and interviewing participants by each method, as well as coding and checking completed questionnaires, are calculated. This cost analysis, when combined with much of the previous analysis, permits some determination of the cost-effectiveness of the alternative survey methods to be made.

Demographic Characteristics of Respondents

Table B-3 presents the demographic characteristics of those participants who completed an interview or a questionnaire. The table shows that the age, sex and race characteristics of those who responded are very similar for each of the three contact methods. It is only the education characteristic where significant deviation occurs.[1] Twenty-two percent of the respondents in the telephone interview subsample had 13 or more years of education. By comparison, only ten percent of the respondents in the personal visit and mail surveys had 13 or more years of education. Thus, if a prime sponsor elects to use the telephone interview method, it may be that a more highly educated sample will respond relative to the personal visit and mail survey methods. Since more highly educated individuals tend to

Table B-3: Demographic Characteristics of Respondents by Contact Method

	Telephone		Personal Visit		Mail Survey		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Age								
16-19	19	16.5	16	15.7	9	18.0	44	16.5
20-24	40	34.8	38	37.3	21	42.0	99	37.1
25-44	49	42.6	40	39.2	15	30.0	104	39.0
45+	7	6.1	8	7.8	5	10.0	20	7.5
Total	115	100.0	102	100.0	50	100.0	267	100.0
Years of Education[C]								
8 or Less	5	4.3	12	11.8	3	5.9	20	7.4
9-11	41	35.3	32	31.4	22	43.1	95	35.3
12	44	37.9	47	46.1	21	41.2	112	41.6
13 or More	26	22.4	11	10.8	5	9.8	42	15.6
Total	116	100.0	102	100.0	51	100.0	269	100.0
Sex								
Male	44	37.9	48	47.1	19	37.3	111	41.3
Female	72	62.1	54	52.9	32	62.7	158	58.7
Total	116	100.0	102	100.0	51	100.0	269	100.0
Race								
Black	35	30.2	35	34.3	16	31.4	86	32.0
White	42	36.2	37	36.3	23	45.1	102	37.9
Hispanic	39	33.6	29	28.4	12	23.5	80	29.7
Other*	-	-	1	1.0	-	-	1	0.4
Total	116	100.0	102	100.0	51	100.0	269	100.0

*Includes American Indian, Alaskan, Asian and Pacific Islander

[C]Significant at the 10% level

experience greater labor market success, the telephone method could lead to a more optimistic view of program outcomes than would be obtained if one of the alternative methods was chosen.

Contact and Completion Rates

A primary issue of concern is the nature and magnitude of the response of participants to each survey method. Table B-4 shows that the proportion of participants who were contacted and the proportion who completed interviews vary by the contact method. The table shows that 48 percent of the participants were contacted in both the telephone and personal visit surveys. However, in the telephone method case, 45 percent of the participants completed the interview, while in the personal visit interview case, only 40 percent of the participants completed the interview. Members of the mail survey subsample are assumed to have been contacted if the Postal Service did not return the mailed questionnaire as undeliverable. Therefore, as would be expected, a relatively large proportion of the mail survey subsample was considered to be contacted, an 80 percent contact rate. However, as is frequently the case with mail surveys, the number of individuals who completed and returned the survey was small. Only 19 percent of the mail survey subsample completed and returned a questionnaire.

One might expect the contact rate for those participants in the personal visit subsample to have been higher than for those participants in the telephone interview subsample. This difference would arise because interviewers had the additional alternative of visiting the address of the participant to attempt an interview. In practice, however, interviewers were very reluctant to visit an address without previously having made an appointment. In fact, this alternative was employed only infrequently. Therefore, the contact rate was virtually identical for both the telephone and personal visit methods.

Table B-4: Contact and Completion Rates, How Contacted and Reason for Non-Completion by Contact Method

	Telephone		Personal Visit		Mail Survey		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Contact Rate[a]	123	47.7	124	48.4	224	83.9	471	60.1
Completion Rate[a]	116	45.0	101	39.5	51	18.9	268	34.2
How Contacted								
Intake Phone No.	109	85.8	101	80.8	-	-	210	44.1
Directory Assist.	2	1.5	2	1.6	-	-	4	0.8
Went to Home	-	-	3	2.4	-	-	3	0.6
Employer	3	2.4	1	0.8	-	-	4	0.8
Prime Sponsor	6	4.7	9	7.2	-	-	15	3.1
Relatives, Friends, Neighbors	6	4.7	7	5.6	-	-	13	2.7
Mail	-	-	-	-	224	100.0	224	47.0
Other	1	0.8	2	1.6	-	-	3	0.6
Total	127	100.0	125	100.0	224	100.0	476	100.0
Reason for Non-Completion								
No Phone No. on Intake	10	3.9	5	2.0	-	-	15	2.9
Wrong No. on Intake	24	9.3	19	7.4	-	-	43	8.3
Disconnected Phone No.	22	8.5	27	10.5	-	-	49	9.5
Unpublished Phone No.	4	1.6	3	1.2	-	-	7	1.3
Out of State Phone	1	0.4	0	0.0	-	-	1	0.2
Moved, No Address	25	9.7	28	10.9	-	-	53	10.2
Could Not Find	39	15.1	34	13.3	-	-	73	14.1
Appointment Not Kept	0	0.0	8	3.1	-	-	8	1.5
Refused to Answer	5	1.9	10	3.9	-	-	15	2.9
Refused to Complete	0	0.0	5	2.0	-	-	5	1.0
Could Not Complete	1	0.4	0	0.0	-	-	1	0.2
Language Problem	1	0.4	0	0.0	-	-	1	0.2
Mail*	-	-	-	-	219	100.0	219	42.4
Other	10	3.9	16	6.3	-	-	26	5.0
Total	142	100.0	155	100.0	219	100.0	516	100.0

*The reason mail survey subsample members did not complete a questionnaire is unknown.

[a]Chi-Square test significant at the 1% level.

Table B-4 also shows the sources of information which were used to obtain a contact with the participants. Of those individuals contacted by either the telephone or the personal visit method, over 80 percent of the contacts were made by means of the telephone number obtained from the prime sponsor files. Such a result is important evidence supporting the notion that one very productive step which prime sponsors can take to potentially improve contact rates is to obtain one or more current telephone numbers during an exit interview at termination. In fact, 95 percent of the participants contacted by either method were contacted by means of the telephone number obtained from the prime sponsor file, by means of contact with friends or relatives or by means of other sources of information available from the prime sponsor. Thus, obtaining a current telephone number during an exit interview both for the participant and a friend or relative, as well as making a concerted effort to gather all information about each participant available throughout the prime sponsor, should enhance the ability of prime sponsors to locate and contact participants.

Finally, Table B-4 presents the reasons for not having completed interviews with certain participants. From the top of the table, it can be seen that the completion rate is much lower for the personal visit subsample than for the telephone interview subsample. The reasons for non-completion, also shown in the table, indicate that the difference in the completion rates results from members of the personal visit interview subsample refusing to complete an interview by failing to keep an appointment, refusing to answer, or refusing to complete the interview. Apparently, participants prefer the convenience and relative anonymity that the telephone interview allows.

Determinants of the Contact and Completion Rates

In addition to studying the contact and completion rates by survey method, it is also of interest to examine the manner in which contact and completion rates vary by demographic and program characteristics. Table B-5 shows that of the seven

Table B-5: Completion and Contact Rate by Demographic and Program Characteristics

	Contacted*		Completed Interview	
	Number	Percent	Number	Percent
Total	247	48.1	268	34.2
Age				
16-19	19	52.8	18	40.0
20-24	98	44.1	88	33.1
25-44	109	51.2	99	36.0
45+	18	51.4	17	47.2
Education				
8 or Less	18	40.9	20	28.2
9-11	85	45.0	96	32.5
12	104	54.2	112	38.5
13 or More	40	44.9	40	31.5
Sex				
Male	99	42.7[b]	109	30.3[b]
Female	148	52.5	159	37.5
Race				
Black	77	42.3	85	31.7[b]
White	90	48.9	104	38.7
Hispanic	78	54.9	78	36.4
Limited English Speaking Ability				
Yes	5	38.5	5	20.0
No	242	48.3	262	34.6
Number of Dependents				
Zero	62	49.2	67	35.3
One	74	46.0	77	30.7
Two	42	48.8	52	36.6
Three	28	44.4	30	33.0
Four	11	44.0	11	26.8
Five	16	69.6	14	56.0
Six	14	46.7	17	38.6
Aid to Families with Dependent Children				
Yes	47	55.3	49	39.5
No	200	46.6	219	33.2

Table B-5: (continued)

	Contacted*		Completed Interview	
	Number	Percent	Number	Percent
Region				
VI	132	50.2	132	33.4
VII	115	45.8	136	35.0
Activity				
On-The-Job Training	26	48.1	21	26.9
Occupational Training	93	46.7	103	34.0
Public Service Employment	70	53.0	74	37.2
Other	58	45.3	68	33.8
Title II Subpart				
IIBC	177	46.3	195	33.3
IID	70	53.0	73	36.7
Placement				
Yes	84	65.1[a]	76	44.7[a]
No	163	42.3	192	31.3

*Only the telephone and personal visit interview subsamples are included in the calculation of the contact rate.

[a]Chi-Square test significant at the 1% level

[b]Chi-Square test significant at the 5% level

[c]Chi-Square test significant at the 10% level

demographic characteristics used, the contact rate is systematically related only to the sex of the participant. That is, the table shows that women tend to be easier to contact than men. The table also shows that of the four program characteristics listed, the contact rate is systematically related only to placement. With regard to the interview completion rate, two demographic characteristics are of importance. Women tend to complete interviews more often and blacks tend to complete interviews less often. In addition, as is the case with the contact rate, the completion rate is higher for those participants who were placed at termination. Since it is very likely that the placement rate and some demographic characteristics are closely related, the use of multivariate statistical techniques is appropriate. To this end, two sets of linear regression equations have been estimated. The first set of equations attempts to identify the determinants of the contact rate. The second set of equations attempts to identify the determinants of the completion rate.

Table B-6 presents the hypothesized relationships between the independent variables and the dependent variables, the contact rate and the completion rate. For the first set of equations, the dependent variable has a value of one if the participant was contacted and zero if not. The data which have been used to estimate this set of equations are combined for the telephone and personal visit subsamples. Due to the inability to verify contact in a mail survey, the mail survey subsample has been excluded for this portion of the analysis. It is hypothesized that the personal visit interview method will lead to significantly more participant contacts. For the second set of equations, the dependent variable has a value of one if the participant completed an interview and zero otherwise. The data which have been used to estimate this second set of equations include all three subsamples. In this case, it is hypothesized that the personal visit interview method will lead to more completed interviews and the mail survey method will lead to fewer completed interviews.

Table B-6: Hypothesized Relationships Between Contact and Completion Rates and Demographic and Program Characteristics

	Contact	Interview Completion
Method		
Telephone	Base	Base
Mail	Not Applicable	-
Personal Visit	+	+
Age		
16-19	-	-
20-24	*	*
25-44	Base	Base
45+	-	-
Years of Education Completed	+	+
Sex		
Male	*	*
Female	Base	Base
Race		
White	Base	Base
Black	*	*
Hispanic	*	*
Limited English		
Yes	-	-
No	Base	Base
No. of Dependents	+	+
AFDC		
Yes	+	+
No	Base	Base
Placement		
Yes	+	+
No	Base	Base
Region		
VI	*	*
VII	Base	Base

+ Variable positively related to dependent variable.
- Variable negatively related to dependent variable.
* Relationship between variable and dependent variable indeterminate.

For the remaining independent variables, it is hypothesized that participants in the 16-to-19 and 45-and-over age groups will be contacted less frequently and complete interviews less often than participants in the 25-to-44 age group. No hypothesis is advanced regarding the behavior of those in the 20-to-24 age group relative to members of the 25-to-44 age group. For those participants with higher levels of education it is thought to be easier to achieve contact and to obtain a completed interview because of a greater familiarity with research generally and survey research in particular. No hypothesis is advanced about the relationship between the sex or race of the participant and contact or completion. Because of the presence of language problems, those with limited english speaking ability are thought to be more difficult to contact and interview. Given greater child and home care responsibilities, those participants with more dependents are hypothesized to be easier to contact and interview. The incentive structure of the AFDC system creates a situation in which recipients are assumed to be at home with greater frequency and thereby may be easier to contact and interview. Those participants who are placed in unsubsidized employment by the prime sponsor generally remain in a relatively compact geographic area and, therefore, are more frequently contacted and interviewed. Finally, no hypothesis is advanced regarding differences which may exist across regions or the sites which conducted the field work.

Table B-7 presents the results of estimating a set of equations which attempts to identify the determinants of participant contact.[2] In the first equation, the only independent variable included is a variable which has a value of one if the participant was a member of the personal visit interview subsample and zero otherwise. The results presented in Table B-7 show that there is no significant difference between the contact rates of the telephone and the personal visit interview subsamples.

Table B-7: Regression Analysis for Participant Contact*

	(1)	(2)	(3)	(4)	(5)
Personal Visit	0.01	0.01	0.01	0.01	0.01
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age 16-19	-	0.04	0.05	0.04	0.03
		(0.09)	(0.09)	(0.09)	(0.09)
Age 20-24	-	-0.05	-0.04	-0.05	-0.06
		(0.05)	(0.05)	(0.05)	(0.05)
Age 45+	-	0.02	0.03	0.02	0.03
		(0.09)	(0.09)	(0.09)	(0.09)
Years of Education	-	0.01	0.01	0.01	0.01
		(0.01)	(0.01)	(0.01)	(0.01)
Sex	-	-0.08[b]	-0.08[b]	-0.08[b]	-0.08[b]
		(0.04)	(0.04)	(0.05)	(0.04)
Black	-	-0.07[c]	-0.07[c]	-0.07[c]	-0.06
		(0.05)	(0.05)	(0.05)	(0.05)
Hispanic	-	0.08[c]	-0.01	0.07	0.04
		(0.06)	(0.06)	(0.07)	(0.07)
Limited English	-	-0.19[c]	-0.17	-0.19	-0.19[c]
		(0.15)	(0.14)	(0.15)	(0.14)
No. of Dependents	-	0.02[c]	0.02[b]	0.02[c]	0.02[c]
		(0.01)	(0.01)	(0.01)	(0.01)
AFDC	-	0.04	0.05	0.04	0.06
		(0.06)	(0.06)	(0.06)	(0.06)
Placement	-	-	0.24[a]	-	0.29[c]
			(0.05)		(0.06)
Region	-	-	-	0.01	-0.12[b]
				(0.05)	(0.06)
Constant	0.48[a]	0.33[b]	0.31[b]	0.33[b]	0.36[b]
	(0.03)	(0.16)	(0.16)	(0.16)	(0.16)
$\bar{R}^2$	0.0	.01	.04	.01	.05
F	0.46	1.52	2.98[a]	1.39	3.06
Degrees of Freedom	1/501	11/491	12/490	12/490	13/489

[a]Significant at the 1% level.
[b]Significant at the 5% level.
[c]Significant at the 10% level.
Standard errors of the coefficient estimated are in parenthesis. Dependent variable has a value of one if the participant has been contacted and zero otherwise. Coefficient estimates have been rounded to the nearest one hundredth for ease of presentation.

The second equation presented in Table B-7 introduces a series of demographic variables into the equation. The first result to note is that the estimate of the coefficient on the personal visit variable did not change with the introduction of the additional variables. This confirms the result that the contact method is not related to the participant's demographic characteristics. The second result to note is that the estimates of the coefficients on the age and education variables are not significantly different from zero. The results also show that females, Hispanics and participants with a large number of dependents are more likely to be contacted, while blacks and participants with limited english speaking ability are less likely to be contacted.

One reason for having undertaken the estimation of these equations is the realization that being placed in unsubsidized employment is not only related to a number of demographic variables but also to having been contacted for an interview. Thus, to examine this issue, a third equation has been estimated which includes a variable which has a value of one for participants who are placed and zero otherwise. Column 3 of Table B-7 indicates that the inclusion of the placement variable leads to three interesting results. First, the personal visit method is not more likely to contact participants. Second, the coefficient estimates on the Hispanic and limited english variables are now no longer significantly different from zero. This is because Hispanics tend to be placed more often and those with limited english speaking ability less often. Thus, in the absence of the placement term, these variables were capturing the effect of placement on contact. Third, it can be seen that the coefficient on the placement variable is positive and significantly different from zero.

An additional reason for having undertaken the estimation of these equations is the possibility that the region in which the project operated has an important effect. Column 4 of Table B-7 shows that when the placement variable is taken out and the region variable, which has a value of one if the participant was in Region VI and zero if the participant was in Region VII, is added, the coefficient estimates

are nearly identical to those presented in Column 3. This is because the region variable is relatively highly correlated with the placement variable. Thus, in the absence of the placement variable, the region variable attempts to play the same role.

Finally, Column 5 of Table B-7 presents an estimate in which both the placement and the region variable are entered. Again, it can be seen that there is no difference between the telephone and personal visit interview method. In addition, females, participants with limited english or a larger number of dependents, those who are placed and those in Region VII are more likely to have been contacted. Because blacks tend to be placed in unsubsidized employment less often and are more likely to be found in the Region VII part of the sample, when the placement and region variables are entered into the equation, the black variable has no separate influence.

In addition to the above analysis, the same set of equations has also been estimated when the dependent variable is the completion status of the interview for the participant. First, Table B-8 shows that, relative to members of the telephone subsample, the members of the mail survey subsample are less likely to complete an interview, and members of the personal visit subsample are about as likely to complete an interview. Second, the sex and the race of the participant play a much less important role in completing an interview than they did in initially contacting the participant. However, as was the case with the previous set of equations, participants with limited english speaking ability are less likely to complete an interview and those with more dependents are more likely to complete an interview. Such a set of results is not unreasonable. While they may be more or less difficult to contact or locate, males, females, whites, blacks and Hispanics, once contacted, are all equally willing to be interviewed. Limited english speaking ability is an impediment not only to contact but also to interview completion. Although it is not intuitively obvious why, it appears that individuals with larger numbers of dependents are not only easier to contact but are also more likely to complete

Table B-8: Regression Analysis for Interview Completion

	(1)	(2)	(3)	(4)	(5)
Mail	-0.42[a]	-0.42[a]	-0.42[a]	-0.41[a]	-0.38[a]
	(0.05)	(0.05)	(0.05)	(0.05)	(0.06)
Personal Visit	-0.05	-0.05	-0.05	-0.05	-0.05
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age 16-19	-	0.02	0.03	0.02	0.01
		(0.07)	(0.08)	(0.07)	(0.07)
Age 20-24	-	-0.04	-0.03	-0.04	-0.04
		(0.04)	(0.04)	(0.04)	(0.04)
Age 45+	-	0.05	0.06	0.05	0.06
		(0.08)	(0.08)	(0.08)	(0.08)
Years of Education	-	0.01	0.01	0.01	0.01
		(0.01)	(0.01)	(0.01)	(0.01)
Sex	-	-0.05[c]	-0.05	-0.05[c]	-0.05
		(0.04)	(0.04)	(0.04)	(0.04)
Black	-	-0.06[c]	-0.07[c]	-0.06	-0.05
		(0.05)	(0.04)	(0.05)	(0.05)
Hispanic	-	0.04	-0.01	0.05	0.04
		(0.05)	(0.05)	(0.05)	(0.05)
Limited English	-	-0.17[c]	-0.17[c]	-0.17[c]	-0.19[c]
		(0.12)	(0.12)	(0.12)	(0.12)
No. of Dependents	-	0.01[c]	0.02[b]	0.01[c]	0.02[c]
		(0.01)	(0.01)	(0.01)	(0.01)
AFDC	-	0.03	0.03	0.03	0.04
		(0.05)	(0.05)	(0.05)	(0.05)
Placement	-	-	0.14[a]	-	0.19[a]
			(0.04)		(0.05)
Region	-	-	-	-0.02	-0.11[b]
				(0.05)	(0.05)
Constant	0.45[a]	0.36[a]	0.35[a]	0.37[a]	0.39[a]
	(0.03)	(0.13)	(0.13)	(0.14)	(0.13)
R^2	.10	.10	.12	.10	.12
F	34.57[a]	6.82[a]	7.20	6.31	7.05
Degrees of Freedom	2/611	12/601	13/600	13/600	14/599

[a]Significant at the 1% level.
[b]Significant at the 5% level.
[c]Significant at the 10% level.
Standard errors of the coefficient estimates are in parenthesis. Dependent variable has a value of one if the participant completed the interview and zero otherwise. Coefficient estimates have been rounded to the nearest one hundredth for ease of presentation.

the interview. Third, as is the case with the first set of equations, those participants who were placed in unsubsidized employment and those in Region VII are more likely to have completed an interview.

Data Quality

Another issue of primary concern is the quality of the data which are generated by each of the three survey methods. Data quality in the present context refers to the consistency and completeness of the data set which results from the use of any one of the three contact methods. It does not refer to quality in the sense that the data accurately reflect the true values of the variables for each individual, as such true values are not known. Rather, the purpose of this section is to make an assessment of the use of the questionnaires with each of the three methods.

Table B-9 presents schematically the eight checks of completeness and consistency to which the data have been subjected. To illustrate the manner in which these checks were done, Table B-9 indicates that choice No. 1 involves completing Section III on the telephone and personal visit questionnaire or questions 2 to 5 on the mail survey questionnaire if the respondent was not working at the time the program ended. As a check of completeness, the percent of those interviews in which Section III or questions 2-5 should have been completed, but the interviewer chose not to complete them, has been calculated. In short, the percent of interviews which were completed with an incorrect choice is calculated for each contact method. Similarly, Table B-9 also indicates that Skip No. 1 involves a skip to the appropriate next question depending on the response to question 14 in the telephone and personal visit questionnaire or question 3 on the mail survey questionnaire. Again, as a check of consistency, the percent of those interviews in which an incorrect skip was made has been calculated for each contact method.

Table B-9: Plan for Checks of Consistency and Completeness of Follow-Up Questionnaires

Choice or Skip Number	Labor Market Situations	Section or Question Number: Telephone and Personal Visit Questionnaire	Section or Question Number: Mail Survey Questionnaire
Choice No. 1	Respondents who were not working at the time program ended	Section III	Q. 2-5
Choice No. 2	Respondents who had one or more jobs	Section IV	Q. 7-16, 17-23 or 24-32
Choice No. 3	Respondents who had more than one job	Section V	Q. 17-23 or 24-33
Choice No. 4	Respondents who were not working at the time of the interview	Section VI	Q. 34-39
Skip No. 1	Respondents who were not working at the time program ended, look for work every week, yes or no	14	3
Skip No. 2	Respondents who had one or more jobs and who left their first job	21	15 or 31
Skip No. 3	Respondents who had more than one job and who were not working at time of interview	25	31
Skip No. 4	Respondents who were not working at the time of the interview and were looking for work, yes or no	28	36

Table B-10 presents the results of these eight checks. It can be seen that the personal visit method results in a more complete and consistent data set. However, relative to the data set produced by the telephone method, the difference in the quality of the personal visit data set is small. In seven of eight instances, the absolute number of errors differs by only one, or not at all.

The mail survey questionnaire, in contrast, resulted in a data set of substantially lower quality than the other two. In order to test the ability of the mail survey to yield a data set which was identical to that generated by the telephone and personal visit questionnaire, a somewhat lengthy mail survey questionnaire was required. A close reading of the mail survey questionnaire will reveal that in order to simplify the instructions required to use the questionnaire, some questions are repeated two or three times, basically to allow for differences in the tenses of verbs. In spite of these elaborate attempts at simplification, the error rate is high for several of the checks done on the mail survey data. In particular, Table B-10 shows that in cases where more than one set of questions may apply, such as choice No. 3 and skip No. 2, the error rate is notably higher. However, it is of some interest to note that the error rate for choice No. 2 is not substantially higher than for either of the other two methods. Without physically examining each questionnaire, it is not known whether those respondents who have held more than one job had greater difficulty completing the questionnaire or if the coding of responses undertaken by project staff members is the source of the difficulty.

Measures of Cost-Effectiveness

A final issue of concern is the cost of collecting data for each of the three methods. The cost figures included in this analysis generally include only the time the interviewers spent searching for and interviewing participants. For the telephone interview subsample, interviewers were required to spend time attempting to locate every member of the sample. This time was spent utilizing the contact methods outlined above. For those individuals who were located, time was also

Table B-10: Check of Consistency and Completeness of Follow-Up Questionnaire
(Percent Incorrect)

	Telephone	Personal Visit	Mail
Choice No. 1	6/36 (17%)	6/38 (16%)	0/20 (0%)
Choice No. 2	7/87 (8%)	5/78 (6%)	3/32 (9%)
Choice No. 3	5/26 (19%)	3/26 (11%)	5/6 (83%)
Choice No. 4	3/51 (6%)	3/52 (6%)	0/25 (0%)
Skip No. 1	2/36 (5%)	1/38 (3%)	1/20 (5%)
Skip No. 2	6/45 (13%)	7/49 (14%)	4/11 (36%)
Skip No. 3	1/51 (2%)	2/52 (4%)	3/25 (12%)
Skip No. 4	0/51 (0%)	0/52 (0%)	0/25 (0%)

spent administering the interview. For the personal visit interview subsample, interviewers were also required to spend time attempting to locate every member of the sample. However, for those sample members who were located, time was spent initially arranging an interview time and date, traveling to the interview, and finally, administering the interview. For the mail survey subsample, time was spent preparing the two mailings and coding the responses contained on each questionnaire as it was returned.

These cost figures do not include two areas of cost. First, the figures do not include time spent in supervising by the survey manager, or in checking and editing completed questionnaires by the interviewers. Second, each completed interview must be keypunched and entered into a computer system, and the resulting data must be edited and cleaned. These costs of the data processing related activities are not included in the cost figures as they do not vary by contact method, and therefore do not affect the relative cost of each method.

Table B-11 presents the cost figures for each of the contact methods. It can be seen that in terms of total cost, the personal visit interview method is the most costly, the mail survey method is the second most costly, and the telephone interview method is the least costly. Because the mail survey is assumed to contact all the participants for whom questionnaires are not returned as undeliverable by the postal service, the mail survey yields the highest contact rate and the lowest cost per contact. However, given the relatively small number of completed interviews which results from the mail survey, it yields only the second lowest cost per completed interview. Although it might be anticipated that the mail survey would be less costly because no interviewer costs are incurred, the substantial investment in time required to complete the mailing and code the responses is not offset by a higher number of completed and returned questionnaires.

Table B-11: Total Cost, Cost Per Contact and Cost Per Completed Interview by Each Contact Method and in Total*

	Telephone	Personal Visit	Mail Survey	Total
Total Cost	$127.61	$715.90	$197.74	$1,041.25
Number of Participants Contacted	71	61	125	257
Number of Interviews Completed	60	44	30	134
Cost/Contact	$ 1.80	$ 11.73	$ 1.58	$ 4.05
Cost/Completed Interview	$ 2.13	$ 16.27	$ 6.59	$ 7.77

* These results are based only on data collected at the Region VI site.

The table also shows that the telephone interview method is the least costly method and that the personal visit method is substantially more expensive. This large difference between the cost of the two methods is due primarily to the time spent traveling as part of the personal visit method. The personal visit method also involves two contacts with the participant. The first contact is the initial telephone contact to arrange a time for the interview and the second contact is the in-person contact to administer the interview. This result points to the relative efficiency of the telephone interview method as a means of locating, contacting and interviewing participants.

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[1] The table shows that even in the case of the education characteristics, the deviation is small. The Chi-Square test indicates rejection of the null hypothesis only at the 10% level.

[2] These equations are estimated by employing the ordinary least squares (OLS) method. It is well known that when the dependent variable is a zero-one dichotomous variable, the coefficient estimates are biased when OLS is used. However, as an approximation OLS has been employed to obtain the estimates which have been presented here: See: Pindyck, Robert S. and Daniel L. Rubinfeld; Econometric Models and Economic Forcasts; (McGraw Hill Co., New York, 1976) Chapter 8, pp. 237-264.

APPENDIX C

Telephone/Personal Visit Follow-Up Questionnaire

PRIME SPONSOR FOLLOW-UP PROJECT

CETA TITLE II

PARTICIPANT FOLLOW-UP QUESTIONNAIRE

Every box should be filled in. If a question is not answered do not leave the boxes blank. Instead, fill them in with one of the following codes unless different missing value codes are specified:

7 = if the respondent refuses to answer
8 = if the question is not applicable
9 = if the respondent does not know

Terminee's Name: _____

Telephone: _____

Address: _____

Other Phone/Contact Information: _____

_____

Card Number: 1 2 — 0 1

I.D. Number: 3 — 8 .

Date	Time	Comments	Interviewer

Prime Sponsor I.D. Number: 9 — 17

Date Interview Completed: 18 — 23 (mo.) (day) (yr.)

How Contacted: (Code only the last method/strategy used to contact respondent.)

1 = Prime Sponsor Intake Information
2 = Employer/School/Other Prime Sponsor Records
3 = Post Office Correction/Follow-Up Mailings
4 = Friends or Relatives
5 = Telephone Directory/Directories
6 = Other _____

24

"Hello, my name is _____. I am calling from _____. We are performing an evaluation of the CETA program in which you participated about six months ago. You have probably received a letter from us recently, telling you about this study. I would like to ask you some questions about what you thought of the CETA program and what you have been doing since you left the program. Do you have time now?"

SECTION I: RESPONDENT'S VIEW OF THE PROGRAM

"The first series of questions has to do with your views of the CETA program."

1. What was your MAIN reason for enrolling in the CETA program? 25 26 1 ☐☐

01 = To Get a Job	05 = H.S. Diploma/GED
02 = To Get a CETA Job	06 = Basic Education Services
03 = To Learn A Skill or Trade	07 = To Learn English
04 = Needed Money	08 = Other_____

2. All things considered, how would you rate the CETA program? 27 2 ☐

(Read choices to respondent)

1 = Excellent 2 = Good 3 = Fair 4 = Poor

3. What was the BEST thing about the CETA program?

_____

4. What was the WORST thing about the CETA program?

_____

5. How would you improve the CETA program?

_____

BEFORE STARTING: (Circle the date the terminee ended the CETA program and today's date on the calendar at left. Work backwards on the calendar covering the entire time period as you fill out the chart below.)

SECTION II: SUMMARY POST-PROGRAM EXPERIENCE

"Now I would like to find out what you have been doing since ending your CETA program, that is between (date ended last program) _____ and now. I would like to start by asking you about what you are doing now, and then ask you a series of questions about your activities during the past few months.

6A. "Which of the following activities are you doing currently?" (Read 5 Activities to Respondent)

Activity Code		Activities	
1	=	Working	GO TO QUESTION 7 (In Chart)
2	=	Attending School	
3	=	Attending a Training Program	
4	=	Serving in the Armed Forces	GO TO QUESTION 11 (In Chart)
5	=	None of These	

6B. "Before that, which of the following activities were you doing?" (Read 5 Activities to Respondent)

Activity Code		Activities	
1	=	Working	GO TO QUESTION 7 (In Chart)
2	=	Attending School	
3	=	Attending A Training Program	
4	=	Serving in the Armed Forces	GO TO QUESTION 11 (In Chart)
5	=	None of These	

(REPEAT QUESTIONS 6B THROUGH 12, AS APPLICABLE, UNTIL THE ENTIRE POST-PROGRAM PERIOD IS ACCOUNTED FOR)

Activity Code	7.What is the Company/ School name?	8.Where is it located?	(If Working) 9.What does this company do?	(If Working) 10.What is/ was your job title?	11.When did you begin?	12.When did you stop? (GO TO Q. 6B)	# of Weeks
1)						PRESENT	
2)							
3)							
4)							
5)							
6)							
7)							
8)							

13. Are any of these jobs "CETA jobs"?

If Yes: Which ones? (Circle row number)

If: WORKING AT TIME ENDED PROGRAM: GO TO SECTION IV
NOT WORKING AT TIME ENDED PROGRAM: GO TO SECTION III
NO JOB SINCE LEAVING CETA: GO TO SECTION VI

SECTION III: NOT WORKING PRIOR TO THE FIRST JOB AFTER CETA

(For Respondents Who Were Not Working At The Time The Program Ended)

"You said that between leaving CETA and _____ you did not work. I would like to ask a few questions about that _____ week time."

14. Did you look for work during every week of that time period? 1 = Yes 2 = No [28] 14 [ ]

IF YES: GO TO SECTION IV
IF NO: GO TO QUESTION 15

15. How many weeks did you look for work during that time? [29 30] 15 [ ]

(If 100% of the time): GO TO SECTION IV
(If less than 100% of the time): GO TO QUESTION 16

16. During the time when you did not look for work, what was the MAIN reason? [31 32] 16 [ ]

01 = Believed No Work was Available In Line of Work or Area
02 = Couldn't Find Any Work
03 = Did Not Want to Work
04 = Lacked Necessary Schooling, Training, Skill or Experience
05 = Employers Thought Too Young or Too Old
06 = Ill Health, Physical Disability
07 = Couldn't Arrange Child Care
08 = Pregnancy
09 = Other Personal Handicap in Finding a Job
10 = Other_____

SECTION IV: INFORMATION ON THE FIRST OR ONLY EMPLOYER AFTER CETA

"Now I Would Like To Get More Information About The Job You Held (Are Holding) At _____ (Company Name) as a _____ (Job Title)."

17. How Did You Find Out About This Job? [33 34] 17 [ ]

01 = CETA Agency
02 = Employment Office/Job Service
03 = Private Employment Agency
04 = Contacted Employer Directly
05 = Friends or Relatives
06 = Answered Newspaper Ad
07 = Other_____

18. What was your starting hourly wage rate? [35] [36] 18 $ [ ] . [ ]

19. What was (is) your final (current) hourly wage rate? [39] [42] 19 $ [ ] . [ ]

20. How many hours did (do) you usually work per week? [43 44] 20 [ ]

21. (If no longer working for this employer)

Why did you leave this job? [45 46] 21 [ ]

01 = Unsatisfactory Work Conditions or Arrangements (Hours, etc.)
02 = Found Higher Paying Job
03 = Returned to School
04 = Problems with Child Care
05 = Pregnancy
06 = Ill Health, Physical Disability
07 = Reached Retirement Age
08 = Laid Off Due to Poor Business Conditions
09 = Temporary or Seasonal Job Ended
10 = Dismissed/Fired
11 = Other_____

SECTION V: INFORMATION ON CURRENT/LAST EMPLOYER IF MORE THAN ONE EMPLOYER AFTER CETA

"Now I would like to get more information about the job you're holding now (last job you held) at _____ (Company Name) as a _____ (Job Title).

22. What was your starting hourly wage rate? 22 $ [47] [ ] . [50] [ ]

23. What is (was) your current (final) hourly wage rate? 23 $ [51] [ ] . [54] [ ]

24. How many hours do (did) you usually work per week? 24 [55] [56] [ ]

25. (If no longer working for this employer): Why did you leave this job? 25 [57] [58] [ ]

- 01 = Unsatisfactory work conditions Arrangements (Hours, etc.)
- 02 = Found Higher Paying Job
- 03 = Returned To School
- 04 = Problems with Child Care
- 05 = Pregnancy
- 06 = Ill Health, Physical Disability
- 07 = Reached Retirement Age
- 08 = Laid Off Due to Poor Business Conditions
- 09 = Temporary or Seasonal Job Ended
- 10 = Dismissed/Fired
- 11 = Other _____

SECTION VI: FOR RESPONDENTS WHO ARE NOT CURRENTLY WORKING

"You said you have not worked since _____. I would like to ask you a few questions about this _____ week period.

26. Have you looked for work? 1 = Yes 2 = No 26 [59] [ ]

27. How many of the _____ weeks have you actually looked for work? 27 [60] [61] [ ] .

28. Are you currently looking for work? 1 = Yes 2 = No 28 [62] [ ]

(If Yes to 28: Ask Questions 29 and 30, Then Ask Question 32 and 33)

29. How are you looking for a job? (List two ways) 29 [63] [64] [ ]

- 01 = CETA Agency
- 02 = Employment Office/Job Service
- 03 = Private Employment Agency
- 04 = Contacting Employers Directly
- 05 = Friends or Relatives
- 06 = Answering Newspaper Ads
- 07 = Other _____

29 [65] [66] [ ]

30. What do you think is the MAIN reason you have not been able to find work? 30 [67] [68] [ ]

- 01 = No Jobs Available
- 02 = Employers think too young or too old
- 03 = Lack of Skills, Schooling or Experience
- 04 = Lack of References
- 05 = Lack of Tools, Licenses
- 06 = Language Problems
- 07 = Police Record
- 08 = Transportation Problems
- 09 = Other _____

(If No to 28: Ask Questions 31 through 33)

31. What are the two MAIN reasons you are not looking for work? 31 [69] [70] [ ]

- 01 = Believes no work is available in line of work or area
- 02 = Can't Find any work
- 03 = Do not want to work
- 04 = Lack necessary schooling, skills or experience
- 05 = Employers think too young or too old
- 06 = Ill health, physical disability
- 07 = Can't arrange child care
- 08 = Pregnancy
- 09 = Other personal handicap in finding a job
- 10 = Other _____

31 [71] [72] [ ]

32. Are you available for work right now? 1 = Yes 2 = No 32 [73] [ ]

33. Are there any other things you would like to tell us about the CETA program?

_____

- THE INTERVIEW IS COMPLETE. PLEASE STOP. -

SUMMARY SECTION

(The purpose of this section is to summarize the information gathered in the Table in Section II.)

Card Number: 1 2 (0 :)

I.D. Number: 3 8

Part I: Duration of Labor Market Activities in the Post-Program Period

A. Number of Weeks Between Date Ended Program and Follow-Up Interview: A 10

B. Number of Weeks Spent Working on Each Job:

1. First Job: 1 12
2. Second Job: 2 14
3. Third Job: 3 16
4. Fourth Job: 4 18
5. Current/Last Job: 5 20

(Add B.1 through B.5) Total → B 22

C. Number of Weeks in School When Not Working: C 24

D. Number of Weeks in Training When Not Working: D 26

E. Number of Weeks Spent in Armed Forces: E 28

F. Number of Weeks When Not Working, Not in School, Not in a Training Program and Not in Armed Forces:

1. Between End of Program and First Job: 1 30
2. Before Second Job: 2 32
3. Before Third Job: 3 34
4. Before Fourth Job: 4 36
5. Before Current/Last Job: 5 38
6. After Current/Last or Only Job: 6 40
7. Total Weeks Not Working, Not in School, in a Training Program or Not in the Armed Forces:

(Add F.1 through F.6) Total → F 42

(Please Note: The answers in Boxes B, C, D, E and F should add up to be approximately equal to the answer found in Box A. Please see Instruction Manual for details.)

Part II: Indicators of Program Outcomes

G. On The Date of Termination, Did the Respondent Have A Job? (43) G ☐

1 = Yes 2 = No

H. What was the Total Number of Jobs Respondent Held Since Leaving CETA? (44 45) H ☐☐

I. Were Any of the Jobs Identified as PSE Jobs? (46) I ☐

1 = First 2 = Second 3 = Third 4 = Fourth 5 = Current/Last 6 = No

J. Is the Respondent Currently Employed? 1 = Yes 2 = No (47) J ☐

K. Is the Respondent Currently Attending School or Another Training Program? (48) K ☐

1 = Yes 2 = No

Part III: Industry and Occupation Codes

SIC: 000 = Not Applicable/Information Missing
DOT: 000.000-000 = Not Applicable/Information Missing

L. Information for First Job

1. Industry _____ SIC: (49 51) L1 ☐☐☐

2. Occupation _____ DOT: (52 60) L2 ☐☐☐.☐☐☐-☐☐☐

M. Information for Current/Last Job

1. Industry _____ SIC: (61 63) M1 ☐☐☐

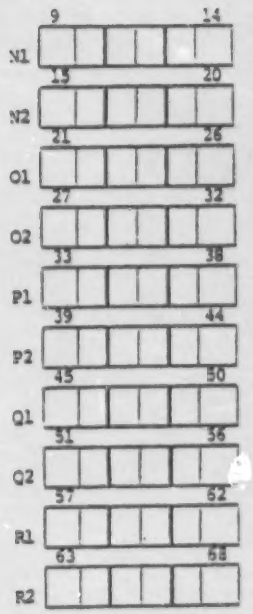
2. Occupation _____ DOT: (64 72) M2 ☐☐☐.☐☐☐-☐☐☐

Card Number: (1 2) 0 3

I.D. Number: (3 8) ☐☐☐☐☐☐

Part IV: Dates Began and Ended Jobs

N.	First Job:	1.	Date Began:
		2.	Date Ended:
O.	Second Job:	1.	Date Began:
		2.	Date Ended:
P.	Third Job:	1.	Date Began:
		2.	Date Ended:
Q.	Fourth Job:	1.	Date Began:
		2.	Date Ended:
R.	Current/Last Job:	1.	Date Began:
		2.	Date Ended:



APPENDIX D

Mail Survey Follow-Up Questionnaire

Dear CETA Participant:

In order to improve the overall quality of CETA training, we are conducting a follow-up evaluation of the program in which you participated. You may have received a letter a few weeks ago informing you of this study. Your views of the program and some general information about your employment situation will be very helpful. You can be assured that any information which you provide on the questionnaire will be held in strictest of confidence.

Attached you will find a brief questionnaire. Not all sections of it will apply to you. Instructions are provided throughout the questionnaire where necessary. Only five or ten minutes of your time should be required to complete it.

Thank you very much for your cooperation in this study.

CETA FOLLOW-UP QUESTIONNAIRE

First, we would like to ask you a few questions about your opinion of the CETA program.

1. What was your MAIN reason for enrolling in the CETA program? Please circle one number.

   1. To Get a Job
   2. To Get a CETA Job
   3. To Learn a Skill or Trade
   4. Needed Money
   5. To Get a High School Diploma or a GED
   6. To Get Basic Education Services
   7. To Learn English
   8. Other Reasons that are Not Listed Here. Please List Other Reasons

   _____

2. All things considered, how would you rate the CETA program? Please circle one number.

   1. Excellent 2. Good 3. Fair 4. Poor

3. What was the BEST thing about the CETA program? Please write what you think is the best thing about the program on the blank line.

   _____

4. What was the WORST thing about the CETA program? Please write what you think is the worst thing about the program on the blank line.

   _____

5. How would you improve the CETA program? Please write how you would improve the program on the blank line.

   _____

_____

_____

Now, we would like to find out what you've been doing during the last several months. We are interested in finding out about the time you may have spent in five different types of activities. These are:

1. Working
2. Attending School
3. Participating in a Training Program
4. Serving in the Armed Forces
5. Not Working (also not in school, a training program or the armed forces)

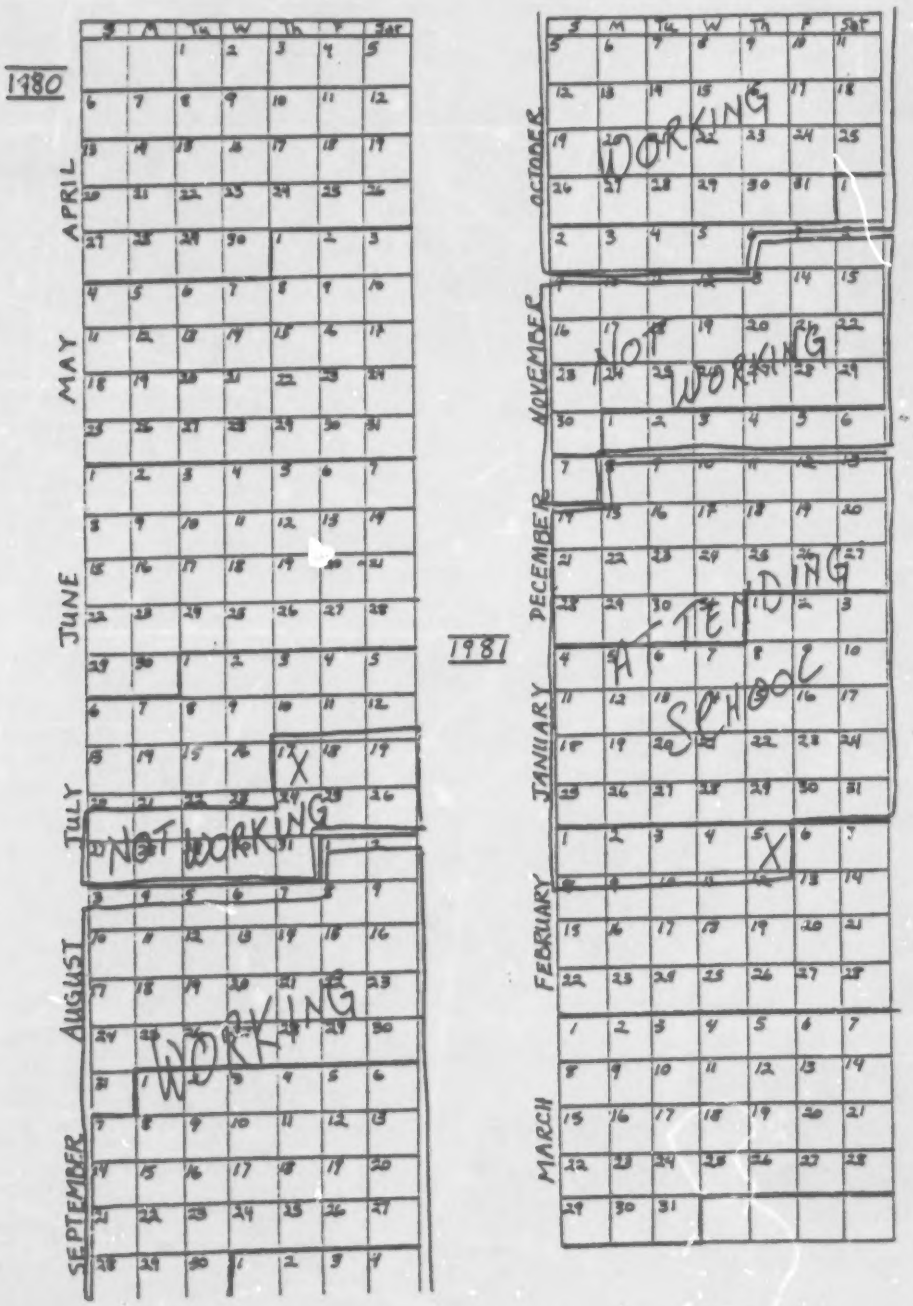
We would like you to think about which of these activities you were involved with since you stopped participating in the CETA program. Then, we would like you to fill out the calendar on page 3. The calendar is designed to record the time you may have spent in each of the above activities. But, before you go ahead and fill out the calendar on page 3, please read the following example which may help you.

Suppose Pat Greene stopped participated in the CETA program on July 17, 1980 and is filling out the calendar on February 5, 1981. Suppose Pat has held one job and attended school since leaving the CETA program. The job began on August 1, 1980 and ended on November 5, 1980. And, Pat began attending school on December 8, 1980 and is still attending school.

Step 1: On page 2, An "X" has been marked on the calendar on July 17, 1980, the day Pat left the program, and on February 5, 1981, the day Pat is filling out the calendar.

Step 2: On page 2, Pat has also circled and labeled the days on the calendar when he was WORKING, NOT WORKING and ATTENDING SCHOOL. From July 17, 1980 to August 1, 1980, Pat was NOT WORKING. From August 2, 1980 to November 5, 1980, Pat was WORKING. From November 6, 1980 to December 7, 1980, Pat was NOT WORKING. Finally, from December 8, 1980 to February 5, 1981, Pat was ATTENDING SCHOOL.

Now you should think about which of the activities listed above you have been involved in since leaving the CETA program. Your experiences may not have been the same as the example presented here. For instance, if you have been involved in two activities at once, such as working and attending school, please be sure to mark it on the calendar. Please fill out the calendar on the next page using Step 1 and Step 2 listed above.



1980

APRIL

S	M	Tu	W	Th	F	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

MAY

S	M	Tu	W	Th	F	Sat
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	Tu	W	Th	F	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

JULY

S	M	Tu	W	Th	F	Sat
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

AUGUST

S	M	Tu	W	Th	F	Sat
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

SEPTEMBER

S	M	Tu	W	Th	F	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

1981

OCTOBER

S	M	Tu	W	Th	F	Sat
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

NOVEMBER

S	M	Tu	W	Th	F	Sat
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

DECEMBER

S	M	Tu	W	Th	F	Sat
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

JANUARY

S	M	Tu	W	Th	F	Sat
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	Tu	W	Th	F	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

S	M	Tu	W	Th	F	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Now we would like to ask you some questions about what you've been doing since you left the CETA program. Please circle those answers which seem best. Not all these questions will apply to you, so please follow the instructions beneath each question.

1. If you have not worked since you left the CETA program, please turn to Question 34 and continue completing this form. If you have worked, please continue with Question 2.

---

2. On the DAY you stopped attending the CETA program, did you have a job?

   Yes, Go to Question 6 and continue. No, Answer Question 3 and continue.

3. Between leaving the CETA program and beginning your first job, did you look for working during EVERY WEEK of that time period?

   Yes. Go to Question 6 and continue. No. Answer Question 4 and continue.

4. During the time between leaving the CETA program and beginning your first job, how many weeks did you look for work? Please write the number of weeks in the box. It may be useful to look at the calendar which you have already filled out.

5. During this time period, when you did not look for work, what were the two MAIN reasons for not looking? Please circle the two MAIN reasons.

   1. I believed no jobs were available in my line of work or my area of interest.
   2. I couldn't find any kind of work.
   3. I didn't want to work.
   4. I lacked the necessary schooling, training, skill or experience.
   5. Employers thought that I was too young or too old.
   6. I had poor health or a physical disability.
   7. I couldn't arrange child care.
   8. I was pregnant.
   9. I had other personal problems in finding a job.
   10. Other reasons that are not listed here. Please list these other reasons_____

---

6. Have you held more than one job since leaving the CETA program?

   Yes. Answer Questions 7-16 and continue.
   No. Turn to Question 16 and continue.

---

7. How many jobs have you held since leaving the CETA program? Please write the number of jobs in the box.

8. How did you find out about your first job which you held after leaving the program? Please circle one number.

   1. Local CETA Office
   2. State Employment Office (Unemployment Office)
   3. A Private Employment Agency
   4. Contacting the Employer Directly
   5. Friends & Relatives
   6. Answering a newspaper ad
   7. Other ways not listed here Please List_____

9. What is the name of the first company you worked for after leaving the program? Please write the name of the company on the blank line.

   _____

10. What does this company do? Please write what the company does on the blank line. _____

11. What was your job title? Please write your job title on the blank line. _____

12. What was you starting hourly wage rate? Please write you wage rate in the box. If you were paid by the week and do not know your starting hourly wage rate, please write your starting weekly salary before any deductions in the box.

$.

13. What was your final hourly wage rate? Please write your wage rate in the box. If your final hourly wage rate was the same as your starting hourly wage rate, leave the box empty and answer questions 14 through 16 If you were paid by the week and do not know your final hourly wage rate, please write your final weekly salary, before any deductions in the box.

$.

14. How many hours per week did you usually work on this job? Please put the number of hours in the box.

15. Why did you leave this job? Please circle the MAIN reason.

1. The working conditions were unsatisfactory.
2. I found a higher paying job.
3. I returned to school.
4. I had problems with child care.
5. I was pregnant.
6. I had poor health or a physical disability.
7. I reached retirement age.
8. I was laid off due to poor business conditions.
9. The job was only seasonal or temporary.
10. I was dismissed or fired.
11. Other reasons that are not listed here. Please list other reasons.

_____

16. Are you currently employed?

Yes. Answer Questions 17 through 23 and 41.
No. Turn to Question 24 through 32 and continue.

17. How did you find out about your current job? Please circle a number.

1. Local CETA Office
2. State Employment Office (Unemployment Office)
3. A private employment agency
4. Contacting the employer directly
5. Friends & Relatives
6. Answering a Newspaper Ad
7. Other ways not listed here Please list_____

18. What is the name of the company you are working for? Please write the name of the company on the blank line. _____

19. What does this company do? Please write what the company does on the blank line. _____

20. What is your job title? Please write your job title on the blank line. _____

21. What was your starting hourly wage rate? Please write your wage rate in the box. If you are paid by the week and do not know your starting hourly wage rate, please write your starting weekly salary before any deductions in the box.

$.

22. What is your current hourly wage rate? Please write your wage rate in the box. If your current hourly wage rate is the same as your starting hourly wage rate, leave the box empty and answer questions 23 and 41. If you are paid by the week and do not know your current hourly wage rate, please write your current weekly salary, before any deductions, in the box.

$.

23. How many hours per week do you usually work on this job? Please put the number of hours in the box.

**** Please Turn to Question 41 ****

---

24. How did you find out about your last job which you held after leaving the program? Please circle one number.

1. Local CETA Office
2. State Employment Office (Unemployment Office)
3. A Private Employment Agency
4. Contacting the Employer Directly
5. Friends & Relatives
6. Answering a Newspaper Ad
7. Other ways not listed here
   Please list _____

25. Now we would like to get some information about your last employer.

What is the name of the last company you worked for after leaving the program? Please write the name of the company on the blank line. _____

26. What does this company do? Please write what the company does on the blank line. _____

27. What was your job title? Please write your job title on the blank line. _____

28. What was your starting hourly wage rate? Please write your wage rate in the box. If you are paid by the week and do not know your starting hourly wage rate, please write your starting weekly salary before any deductions in the box.

$.

29. What was your final hourly wage rate? Please write your wage rate in the box. If your final hourly wage rate was the same as your starting hourly wage rate, leave the box empty and answer questions 30 through 32 and continue. If you are paid by the week and do not know your final hourly wage rate, please write your final weekly salary, before any deductions in the box.

30. How many hours per week did you usually work on this job? Please put the number of hours in the box.

31. Why did you leave this job? Please circle the MAIN reason.

1. Working conditions were unsatisfactory.
2. I found a higher paying job.
3. I returned to school.
4. I had problems with child care.
5. I was pregnant.
6. I had poor health or a physical disability.
7. I reached retirement age.
8. I was laid off due to poor business.
9. The job was only seasonal or temporary.
10. I was dismissed or fired.
11. Other reasons that are not listed here. Please list other reasons

_____

32. Since having finished working for your last employer, have you looked for work?

Yes. Answer Questions 33 and continue. No. Answer Questions 39, 40 and 41.

33. Since having finished working for your last employer, how many weeks did you look for work? Please write the number of weeks in the box. It may be useful to look at the calendar which you have already filled out.

**** Please Turn to Question 36 ****

34. Since leaving the CETA program have you looked for work?

Yes. Answer Question 35 and continue. No. Answer Questions 39, 40 and 41.

35. Since leaving the CETA program, how many weeks did you look for work? Please write the number of weeks in the box. It may be useful to look at the calendar which you have already filled out.

36. Are you currently looking for work?

Yes. Answer Questions 37, 38 and 41. No. Answer Questions 39, 40 and 41.

37. How are you looking for a job? Please circle two ways.

1. Local CETA Office
2. State Employment Office (Unemployment Office)
3. A Private Employment Agency
4. Contacting the Employer Directly
5. Friends & Relatives
6. Answering a Newspaper Ad
7. Other ways not used here Please list_____

38. What do you think is the MAIN reason you have not been able to find work? Please circle the MAIN reason.

1. No jobs are available.
2. Employers think I am too young or too old.
3. I lack the necessary schooling, training, skill or experience.
4. I lack the required references.
5. I lack the necessary tools or licenses
6. I have a language problem.
7. I have a police record.
8. I have transportation problems.
9. Other reasons that are not listed here. Please list these other reasons_____

**** Please Go To Question 41 ****

---

39. What are the two MAIN reasons you are not looking for work? Please circle the two MAIN reasons.

1. I believe no jobs are available in my line of work or my area of interest.
2. I can't find any kind of work.
3. I don't want to work.
4. I lack the necessary schooling, training, skill or experience.
5. Employers think that I am too young or too old.
6. I have poor health or a physical disability.
7. I can't arrange child care.
8. I am pregnant.
9. I have other personal problems in finding a job.
10. Other reasons that are not listed here. Please list those other reasons_____

40. Are you available for work right now?

Yes. Answer Question 41. No. Answer Question 41.

---

41. The interview is complete. Thank you very much for your help. If there are any other things you would like to tell us about the CETA program, please use the space below for your comments.

**** Please Stop. Please return the questionnaire to us by using the envelope which has been supplied to you. ****

APPENDIX E

Region One Follow-Up Evaluation Project Follow-Up Questionnaire

REGION ONE FOLLOW-UP EVALUATION PROJECT

FOLLOW-UP QUESTIONNAIRE: ADULT PROGRAMS

PREPARED BY: POLICY AND EVALUATION DIVISION
DEPARTMENT OF MANPOWER DEVELOPMENT
COMMONWEALTH OF MASSACHUSETTS

IN CONJUNCTION WITH: REGION ONE FOLLOW-UP EVALUATION PROJECT

Every box should be filled in. If a question is not answered do not leave the boxes blank. Instead, fill them in with one of the following codes unless different missing value codes are specified:

7 = if the respondent refuses to answer
8 = if the question is not applicable
9 = if the respondent does not know

Terminee's Name: _____

Address: _____

Telphone: _____

Other Phone/Contact Information: _____

_____

_____

Date	Time	Comments	Interviewer

Interview Status/Reason For No Interview

01 = Completed
02 = No Phone No. At Intake
03 = Incorrect Phone No. At Intake
04 = Disconnected Phone
05 = Unpublished Phone No.
06 = Moved: Address Unknown
07 = Participant Refused Interview
08 = Participant Refused to Complete
09 = Could Not Locate
10 = Language Problem
11 = Death
12 = Participant could not complete
13 = In Military
14 = Out of State Phone No.
15 = Incarcerated

56 57

How Contacted

01 = Intake Phone Number
02 = Directory Assistance
Follow-Up Contact Letter:
03 = Responded by Mail
04 = Responded by Phone
05 = Employer
06 = Prime Sponsor Records
07 = Other Social Service Agency
08 = School
09 = Military
10 = Post Office Correction
11 = Relatives
12 = Friends
13 = FMIS
14 = Program Operator Record
15 = Other _____
16 = NA or Not Contacted

58 59

60 61

Total Number Phone Calls and Home Visits:

62 63

Date Interview Completed:

64 69

Interviewer I.D.:

70 71

Card Number: 0 6

I.D. Number:

SECTION I: RESPONDENT'S VIEW OF PROGRAM

"The first series of questions has to do with your views of CETA".

1. What was your MAIN reason for enrolling in the CETA program? 9 10

01 = A "CETA Job"
02 = Help finding a job
03 = A job
04 = A better job
05 = Learn a skill
06 = Stipend
07 = U.S. Diploma/GED
08 = Basic Education Services
09 = Instruction in English
10 = Other_____

(7) 2. What do you think you would have done if you had not enrolled in the CETA program? 11 12

_____

(8) 3. What was the BEST thing about the CETA program? 13 14

_____

(9) 4. What was the WORST thing about the CETA program? 15 16

_____

5. All things considered, how would you rate the CETA program? 17

1 = Excellent 2 = Good 3 = Fair 4 = Poor

6. Do you have any other feelings about the CETA program you would like to express? 18 19

_____

_____

SECTION II: SUPPORTIVE SERVICES

"Now I would like to ask you a few questions about some services you may have received while in CETA".

7. While in the CETA program did you receive any of the following services from CETA or any other agency:

a. Child Care? 20

b. Health Services? 1 = Yes 2 = No 21

c. Transportation Assistance? 22

d. Legal Services? 23

(IF YES TO 7) 8. Did you receive enough _____? 24
(types of services received)

a. Child Care? 25

b. Health Services? 26

c. Transportation Assistance? 1 = Yes 2 = No

d. Legal Services? 27

FOR RESPONDENTS WHO DID NOT RECEIVE ALL FOUR TYPES:

9. Would you have been able to get more out of your CETA program if you had received these (other) services, that is:

a.	Child care?	1 = Yes 2 = No	a. 28
b.	Health Services?		b. 29
c.	Transportation Assistance?		c. 30
d.	Legal Services?		d. 31

SECTION III: SUMMARY POST-PROGRAM EXPERIENCE

"Now I would like to find out what you have been doing since ending your CETA program, that is between (date ended program of termination) and now."

10a. Are you currently working, attending school, another training program or doing something else?

(IF SOMETHING ELSE)

10b. What is it that you are doing? (ask questions 11 through 16 until the entire post-program period is accounted for).

*Activity Codes: 1 = Employed 2 = School 3 = Training Program 4 = Something Else

*Activity	11. What is the Company/ School name?	12. Where is it located?	(If Working) 13. What is your job title?	14. When did you begin?	15. When did you stop?	16. Before that what were you doing (that is, working, school, etc.)
1)					PRESENT	
2)						
3)						
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						

17. Are any of these jobs "CETA jobs"?
(If yes) Which ones? (Check column 16)

If: WORKING AT TIME ENDED PROGRAM, go to question 21, p. 5, Section V.

NOT WORKING AT TIME ENDED PROGRAM, go to question 18, p. 5, Section IV.

NO JOB SINCE LEAVING CETA, go to question 63, p. 8, Section X.

SECTION IV: NON-EMPLOYMENT PRIOR TO THE FIRST JOB AFTER CETA

(For Respondents Who Were NOT WORKING At Time Ended Program)

"You said that between leaving CETA and _____ you did not work. I would like to ask a few questions about that time".

18. Did you look for work during that time? 1 = Yes 2 = No [17]

19. How many weeks did you look for work during that time? [17-18]

20. (If less than 100% of the time) during the time when you did not look for work what were the reasons? (two responses) [15-16] [17-18]

01 = Field Overfilled
02 = Inadequate Training/Skills
03 = Unsure of Myself
04 = Personal Problems
05 = Child Care
06 = Health
07 = Pregnancy
08 = Tired of Looking
09 = Did Not Want To Work
10 = Collecting Unemployment Insurance
11 = In CETA
12 = In School
13 = Waiting for Job To Begin
14 = Other_____

SECTION V: INFORMATION ON THE FIRST (1st) JOB AFTER CETA

(For Respondents Who Held AT LEAST ONE JOB After CETA)

"Now I would like to get more information about the job you held (are holding) at _____ (company name) as a _____ (job title)."

21. How did you find out about this job? [39-40]

01 = Agency referral
02 = DES
03 = Private Agency
04 = Friend/Relative
05 = Newspaper
06 = Walk-in
07 = School

22. What does this company do?_____

23. What was your starting hourly wage rate? $ [41-44]

24. How many hours did you usually work per week? [45-46]

-1 = Not Applicable -3 = Respondent Does Not Know

FOR CLASSROOM SKILLS TRAINING AND OJT TERMINEES ONLY:

25. Was this position's work related to your CETA training? 1 = Yes 2 = No [47]

26. Do you think you could have performed the job's duties without the CETA training? [48]
1 = Yes 2 = No

27. Did your wage change on this job?

28. What was/is your final/current hourly wage rate? $ [49-52]

(If no change, record wage reported in Question 23)

29. While working for _____ (company name) did your job's duties change? [53]
1 = Yes 2 = No

(IF YES TO 29) 30. Did you have a new job title? SOC: [54-57]

-1 = Not Applicable -3 = Respondent Does Not Know

---

31. Was the new job a promotion? 58

1 = Yes 2 = No 31. ☐

FOR CET AND OJT TERMINEES ONLY:

32. Was this position's work related to your CETA training? 59

1 = Yes 2 = No 32. ☐

33. Do you think you could have performed this job's duties without the CETA training? 60

1 = Yes 2 = No 33. ☐

34. All things considered, how would you rate this employer? 61

1 = Excellent 2 = Good 3 = Fair 4 = Poor 34. ☐

35. All things considered, how would you rate this type of work? 62

1 = Excellent 2 = Good 3 = Fair 4 = Poor 35. ☐

10 36. Why did you leave this job?_____ 63 64

36. ☐☐

_____

_____

SECTION VI: RESPONDENT'S SECOND (2nd) JOB AFTER CETA.
(For Respondents Who Have Held AT LEAST THREE (3) JOBS After CETA)

"I would also like to get a little more information about the job you held at _____ as a _____".

37. What was your final hourly wage? 65 66 67 68

37. $ ☐☐.☐☐

38. How many hours per week did you usually work? 69 70

-1 = Not Applicable -3 = Respondent Does Not Know 38. ☐☐

10 39. Why did you leave this job?_____ 71 72

39. ☐☐

_____

_____

SECTION VII: RESPONDENT'S THIRD (3rd) JOB AFTER CETA.
(For Respondents Who Have Held AT LEAST FOUR (4) JOBS After CETA)

"These questions refer to the job you held at _____ as a _____".

40. What was your final hourly wage? 73 74 75 76

40. $ ☐☐.☐☐

41. How many hours per week did you usually work? 77 78

-1 = Not Applicable -3 = Respondent Does Not Know 41. ☐☐

Card Number: 1 2 0 7

I.D. Number: 3 8

10 42. Why did you leave this job?_____ 9 10

42. ☐☐

_____

_____

SECTION VIII: RESPONDENT'S FOURTH (4th) JOB AFTER CETA
(For Respondent's Who Have Held AT LEAST FIVE (5) JOBS After CETA)

"These questions refer to the job you held at _____ as a _____."

43. What was your final hourly wage rate? 43. $ [11][12][13][14]

44. How many hours per week did you usually work? [15][16]
-1 = Not Applicable -3 = Respondent Does Not Know 44. [17][18]

10 45. Why did you leave this job?_____ 45. [19][20]

_____

_____

SECTION IX: RESPONDENT'S CURRENT/LAST JOB
(For Respondents Who Have Held AT LEAST TWO (2) JOBS After CETA)

"Now I would like to get more information about the job you're holding now (last job you held) at _____ as a _____."

46. How did you find out about this job? 46. [21][22]

01 = Agency referral
02 = DES
03 = Private Agency
04 = Friend/Relative
05 = Newspaper
06 = Walk-in
07 = School

47. What does this company do?_____ 47. [23][24]

48. What was your starting hourly wage rate? 48. $ [25][26][27][28]

49. How many hours do you usually work per week? 49. [29][30]
-1 = Not Applicable -3 = Respondent Does Not Know

FOR CLASSROOM SKILLS TRAINING AND OJT TERMINEES:

50. Was this position's work related to your CETA training? 50. [31]

1 = Yes 2 = No

51. Do you think you could have performed the job's duties without the CETA training? 1 = Yes 2 = No 51. [32]

52. Did your wage change on this job? 52. [33]

53. What was/is your final/current hourly wage rate? 53. $ [34][35][36][37]

(If no change, record wage reported in Question 48)

54. While working for _____ did your job's duties change? 54. [38]

1 = Yes 2 = No

(IF YES TO 54) 55. Did you have a new job title? SOC: 55. [39][40][41][42]
- 1 = Not Applicable
- 3 = Respondent Does Not Know

56. Was/is the new job a promotion? 56. [43]

1 = Yes 2 = No

FOR CST AND OJT TERMINEES WHO CHANGED JOBS ONLY:

57. Was this position's work related to your CETA training? 57. [44]

1 = Yes 2 = No

58. Do you think you could have performed the job's duties without the CETA training? 1 = Yes 2 = No — 40 — 58. [ ]

59. All things considered, how would you rate this employer? — 41 — 59. [ ]

1 = Excellent 2 = Good 3 = Fair 4 = Poor

60. All things considered, how would you rate this type of work? — 42 — 60. [ ]

1 = Excellent 2 = Good 3 = Fair 4 = Poor

61. Is this job better than the first after CETA? — 43 — 61. [ ]

1 = Yes 2 = No

10 62. Why did you leave this job?_____ — 44 45 — 62. [ ][ ]

SECTION X: FOR RESPONDENTS WHO ARE NOT CURRENTLY EMPLOYED

(If Respondent is Currently Employed this section Is Not Applicable, Proceed to Section XII, page 9, Question 70).

"You said you have not worked since_____. I would like to ask you a few questions about this _____ week period."

63. Have you looked for work? 1 = Yes 2 = No — 46 — 63. [ ]

64. How many of the _____ weeks have you actually looked for work? — 47 48 — 64. [ ][ ]

65. Are you currently looking for a job?

(IF YES TO 65)

66. How are you looking for a job? (two responses) — 49 50 — 66. [ ][ ] — 51 52 [ ][ ]

01 = Training Agency
02 = DES
03 = Private Agency
04 = Friends/Relatives
05 = Newspaper
06 = Walk-In
07 = School

67. What do you think are the reasons you are not able to find work? (two responses) — 53 54 — 67. [ ][ ] — 55 56 [ ][ ]

01 = No jobs available
02 = Employers think too young/too old
04 = Lack of experience
05 = Lack of education
06 = Lack of references
07 = Lack of tools, licenses, etc.
08 = Language barrier
09 = Police record
10 = Lacked transportation
11 = Racial discrimination
12 = Sexual discrimination
13 = Other reason (specify)
14 = Don't know
15 = Waiting for school/job to begin

(IF NO TO 65)

68. Why are you not looking for work? (two responses) — 57 58 — 68. [ ][ ] — 59 60 [ ][ ]

01 = Field Overfilled
02 = Inadequate Training/Skills
03 = Unsure of Myself
04 = Personal Problems
05 = Child Care
06 = Health
07 = Pregnancy
08 = Tired of Looking
09 = Did Not Want to Work
10 = Collecting Unemployment Insurance
11 = In CETA
12 = In School
13 = Incarcerated

69. Would you like a job right now? — 61 — 69. [ ]

1 = Yes 2 = No

SECTION XI: RESPONDENT'S OTHER POST-PROGRAM EXPERIENCES
(FOR ALL RESPONDENTS)

62 a. [ ]

70. Since leaving the CETA program on _____ have you attended school, a training program or enlisted in the military?

63 b. [ ]

64 c. [ ]

a. School
b. Training Program
c. Military

1 = Yes
2 = No (If No To All, Go To Section XII, page 10)

65 a. [ ]

66 b. [ ]

71. Are you currently attending (activities named)?

67 c. [ ]

1 = Yes 2 = No

A. ATTENDANCE IN SCHOOL/TRAINING PROGRAM

68 69
72. [ ]

72. What type of school/training program are (were) you attending?

01 = 4-Year College
02 = Junior/Community College
03 = General Academic High School
04 = Public Vocational Technical High School
05 = Private Vocational School
06 = Language (ESL)

70
73. [ ]
71 72

73. Are (were) you attending full or part-time?

1 = Full 2 = Part

11 74. What are you studying? _____

73 74
74. [ ]

75. How many weeks did (have) you attend(ed) the school/training program?

73. [ ]

75
76. [ ]

(IF NOT CURRENTLY ATTENDING) 76. Did you complete the program?

1 = Yes 2 = No

76
77. [ ]

(IF NOT CURRENTLY ATTENDING AND H.S. INDICATED IN 72) 77. Did you receive your diploma?

1 = Yes 2 = No

1 2
Card Number: 0 9

3 8
I.D. Number: [ ]

B. ENLISTED IN THE MILITARY

9
78. [ ]

78. Why did you join the military?

1 = To receive training
2 = Career Choice
3 = No better opportunities
4 = Other

10 15
79. [ ]

79. On what date did you join the military?

16 17
80. [ ]

11 80. What do you hope to learn (or are you learning) in the military?

_____

_____

_____

SECTION XII: SUMMARY OF PRE-PROGRAM LABOR MARKET EXPERIENCE

Part A. Labor Force Participation

(Part A only applies to those respondents who worked LESS THAN 52 weeks in the One Year Period Prior to Application)

"I need to ask you some questions about the experiences you had before starting your CETA program on _____. According to the information we received from _____ CETA, you worked at the following jobs during the year before CETA:

_____ (job title) at _____ (business) from_____ to _____

_____ at _____ from_____ to _____

_____ at _____ from_____ to _____

for a total of _____ weeks worked."

(If work history information covers less than 52 weeks)

81. Did you work during the remaining _____ weeks between _____ and _____?

(IF YES TO 81) 82. Approximately how many of those _____ weeks did you work? 18 19 82. ___

(IF NO TO 81, code 82 zero)

Calculate the total number of weeks worked and proceed.

83. (If total number of weeks worked is less than 52) During the _____ weeks that you were not working in the year before you entered CETA did you look for a job? 20 83. ___

1 = Yes 2 = No

(IF YES TO 83) 84. Approximately how many of those _____ weeks did you spend looking for a job? (If none, code 84 zero) 21 22 84. ___

85. What do you think were the reasons you were not able to find work? (two responses) 23 24 25 26 85. ___ ___

01 = No jobs available
02 = Employers think too young/too old
03 = Lack of skill
04 = Lack of experience
05 = Lack of education
06 = Lack of references
07 = Lack of tools, licenses, etc.
08 = Language barrier
09 = Police record
10 = Lacked transportation
11 = Racial discrimination
12 = Sexual discrimination
13 = Other reason (specify)
14 = Don't know

(If number weeks worked and number weeks looked is less than 52)

86. What were the reasons you did not look for work? (two responses) 27 28 29 30 86. ___ ___

01 = Field overfilled
02 = Training inadequate
03 = Unsure of myself
04 = Personal problems
05 = Child Care
06 = Health
07 = Pregnancy
08 = Tired of looking
09 = Did not want to work
10 = Collecting U.I.
11 = In CETA
12 = In school
13 = Incarcerated
14 = Waiting for CETA/school/job to begin

Part B Longest Job Ever Held Prior To Entering CETA

"Now I would like you to think about your entire work history"

87. Of all the full-time jobs you have ever held, what was your job title (or duties) on the job held for the longest period of time? 87. [31][32][33][34]

SOC: _____

-1 = Not Applicable -3 = Respondent Does Not Know

88. Approximately how long did you hold this job? (record in weeks) 88. [35][36][37]

89. Approximately what was the highest hourly wage you earned at this job? $ 89. [38][39][40][41]

90. When did you leave this job? 90. [42][43][44][45][46][47]

SECTION XIII: DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS UPDATE

"Before ending this interview I need to update a few important pieces of information."

91. Are you: 1 = Married
2 = Single (never married)
3 = Widowed
4 = Separated or Divorced? 91. [48]

92. How many dependents do you have? (Excluding Self) 92. [49][50]

(IF ONE OR MORE DEPENDENTS) 93. Of those _____ dependents, how many are under six years of age? 93. [51][52]

94. Are you providing more than half of your family's earned income? 94. [53]

1 = Yes 2 = No

95. Since leaving CETA have you received any of the following forms of Public Assistance Payments or Unemployment Compensation: (three responses; if respondet received no payment, code "98") 95. [54][55] [56][57] [58][59]

01 = AFDC
02 = Food Stamps
03 = U.I.
04 = General Relief
05 = Veterans Benefits
06 = Medicaid
07 = SSI
08 = Social Security
09 = WIN/AFDC

(IF YES TO 95) 96. [60]

96. Are you currently receiving (specify the types indicated by respondent in question 95)? [61]

1 = Yes 2 = No [62]

FOR THOSE WITH NO H.S. DIPLOMA. (SEE QUESTION 13 ON INTAKE)

97. Have you received a GED? 1 = Yes 2 = No 97. [63]

(IF YES TO 97) 98. Did you receive your GED while in CETA or since leaving? 98. [64]

1 = In CETA
2 = Since Leaving

(2) 99. What town or city are you living in now? 99. [65][66][67]

END OF INTERVIEW

SECTION XIV: SUMMARY OF POST-PROGRAM INFORMATION

After the interview is completed, code the following questions from the information recorded on the summary table:

Card Number: 0 9 (1 2)

I.D. Number: (3 – 8)

A. Number of weeks between date ended program and interview: (9 10) A.

B. On the date of termination did the respondent have a job? (11) B.

1 = Yes 2 = No

C. (If Job Placed) Is the first job different from that indicated at placement? (12) C.

1 = Yes 2 = No

D. How many weeks did the respondent spend on each job?

1. First job:	1.	(13 14)
2. Second job:	2.	(15 16)
3. Third job:	3.	(17 18)
4. Fourth job:	4.	(19 20)
5. Current/last job:	5.	(21 22)

E. How many weeks did the respondent spend not working and not in school?

1. Between END of program and FIRST job:	1.	(23 24)
2. Before SECOND job:	2.	(25 26)
3. Before THIRD job:	3.	(27 28)
4. Before FOURTH job:	4.	(29 30)
5. Before CURRENT/LAST JOB:	5.	(31 32)
6. After CURRENT/LAST job:	6.	(33 34)

F. How many weeks did respondant spend in school or a training program when not working? (35 36) F.

G. What was the total number of jobs respondent held since leaving CETA? (37 38) G.

*NOTE: Use The Following Missing Value Codes On SIC and SOC Questions.

-1 = Not Applicable -3 = Respondent Does Not Know

H. Information on FIRST job:

* 1. Industry - SIC: 39 41

* 2. Occupation - SOC: 42 45

3. Date Began: 46 51

4. Date Ended 52 57

I. Information on SECOND job:

* 1. Industry - SIC: 58 60

* 2. Occupation - SOC: 61 64

Card Number: 1 0

I.D. Number: 3 8

3. Date Began: 9 14

4. Date Ended 15 20

J. Information on THIRD job:

* 1. Industry - SIC: 22 23

* 2. Occupation - SOC: 24 27

3. Date Began 28 33

4. Date Ended 34 39

K. Information on FOURTH Job:

* 1. Industry - SIC: 40 42

* 2. Occupation - SOC: 43 46

3. Date Began 47 52

4. Date Ended 53 58

L. Information on CURRENT/LAST job:

* 1. Industry - SIC: 59 61

* 2. Occupation - SOC: 62 65

3. Date Began 66 71

4. Date Ended 72 77

M. Were any jobs identified as PSE jobs? 78 M.

1 = First 2 = Second 3 = Third 4 = Fourth 5 = Current/Last 6 = No

N. Is the respondent currently employed? 79 N.

1 = Yes 2 = No

APPENDIX F

Participant Information Form

PRIME SPONSOR FOLLOW-UP PROJECT

CETA TITLE II
PARTICIPANT INFORMATION FORM

For Use In Conjunction With The
Participant Follow-Up Questionnaire

Every box should be filled in. If a question is not answered do not leave the boxes blank. Instead, fill them in with one of the following codes unless different missing value codes are specified:

8 - If the question is not applicable
9 - If the information is missing

Terminee's Name: _____

Address: _____

Telephone: _____

Other Phone/Contact Information: _____

_____

_____

Card Number: (1 2) 0 1

I.D. Number: (3 8)

1. Date of Termination: (9 16) 1

2. Date of Enrollment: (17 22) 2

3. Date of Application: (23 28) 3

4. Prime Sponsor: (29) 4

1 = 4 =
2 = 5 =
3 =

5. The Title II Subpart of Termination: (30) 5

1 = Title IIB 2 = Title IIC 3 = Title IID

_____

_____

SECTION I: DEMOGRAPHIC INFORMATION

6. Sex: 1 = Male 2 = Female (31) 6

7. Birth Date: (32 37) 7

8. Race/Ethnicity: 38 39 8

01 = Black (non-Hispanic) 04 = American Indian/Alaskan Native
02 = White (non-Hispanic) 05 = Asian/Pacific Islander
03 = Hispanic

9. Limited English Speaking Ability: 1 = Yes 2 = No 40 9

10. Offender: 1 = Yes 2 = No 41 10

11. Handicapped: 1 = Yes 2 = No 42 11

12. Years of Education Completed: 43 44 12

13. High School Status: 1 = School Dropout/No GED
2 = High School Student
3 = High School Graduate/GED Recipient
4 = Post-High School Attendee 45 13

14. Family Status: 1 = Single Parent
2 = Parent/2-Parent Family
3 = Family Member
4 = Non-Dependent Individual 46 14

15. Number of Dependents Excluding Terminee: (if none record zero) 47 48 15

16. Military Status: 1 = Veteran
2 = Vietnam Era Veteran
3 = Special Disabled Veteran
4 = Other
5 = None (Never Enlisted/Served) 49 16

17. Type(s) of Transfer Payments Received: 50 17

(List up to three) 51 17

1 = AFDC 3 = General Relief 5 = S.S.I.
2 = U.I. 4 = Veterans Benefits 52 17

18. Gross Earned Family Income: $_____(income) for_____(# months) 53 57 18 $

19. Gross Earned Personal Income: $_____(income) for_____(# months) 58 62 19 $

20. Total Other (Included) Income: $_____(income) for_____(# months) 63 67 20 $

21. Source, Other (Included) Income: (List up to two) 68 21

1 = Alimony 4 = Private Disability 7 = Armed Forces Retirement
2 = Child Support 5 = Rentals
3 = Retirement Benefits 6 = OASI 69 21

SECTION II: PRE-CETA LABOR MARKET EXPERIENCE SUMMARY - SIX (6) MONTH PERIOD BEFORE CETA

22. Total Number of Weeks Not Employed During 6-Month Period Before CETA (00-26): 22 [70 71]

23. Total Number of Weeks Employed (All Jobs Added Together) During 6-Month Period Before CETA (00-26): 23 [72 73]

(The answers to Questions 22 and 23 should sum to 26 weeks).

24. Number of Jobs Held During 6-Month Period Before CETA: 24 [74 75]

Card Number: [1 2] 02

I.D. Number: [3 8]

SECTION III: PRE-CETA WORK HISTORY

A. Most Recent Job Held Before CETA

25. Company Name: _____ SIC: 25 [9 11]

Company Address: _____

Kind of Business: _____

000 = Not Applicable/Information Missing

26. Job Title: _____ DOT: 26 [12 20]

000.000-000 = Not Applicable/Information Missing

27. Final Hourly Wage: 27 $ [21 24]

28. Hours Worked Per Week: 28 [25 26]

29. Date Began: 29 [27 32]

30. Date Ended: 30 [33 38]

31. Number of Weeks Worked On Most Recent Job: 31 [39 41]

B. Second Most Recent Job Held Before CETA

32. Company Name: _____ SIC: 32 [42 44]

Company Address: _____

Kind of Business: _____

000 = Not Applicable/Information Missing

33. Job Title:_____ DOT: 33 [45 | 53]

000.000-000 = Not Applicable/Information Missing

34. Final Hourly Wage: 34 $ [54 | 57]

35. Hours Worked Per Week: 35 [58 | 59]

36. Date Began: 36 [60 | 65]

37. Date Ended: 37 [66 | 71]

38. Number of Weeks Worked on Second Most Recent Job: 38 [72 | 74]

_____

_____

Card Number: [1 | 4] 0 3

I.D. Number: [2 | 8]

SECTION IV: PARTICIPANT'S CETA PROGRAM HISTORY

This section gathers information about the terminee's CETA program sequence, starting with the Program of Termination and working back to the second and third most recent programs. Parts A, B and C below attempt to identify sequential, simultaneous or overlapping program components.

Before beginning this section, it will be helpful to identify and note the terminee's three most recent programs and the sequence in which the services were provided.

39. Total Number of CETA Programs Under Titles II, IV, VI and VII: 39 [9]

A. Program of Termination (Most Recent Program)

40. Title II Subpart: 40 [10]

1 = Title IIB 2 = Title IIC 3 = Title IID

41. Type of Program: 41 [11 | 12]

01 = OJT
02 = Work Experience
03 = Skills Training
04 = Direct Placement/Services Only
05 = Job Search Assistance
06 = English as a Second Language
07 = GED
08 = Basic Education
09 = PSE Job
10 = Other_____

42. Agency (Service Provider)_____ 42 [13 | 14]

43. Date Began: 43 [15 | 20]

44. Date Ended: 44 [21 | 26]

45. Number of Weeks: 27 29 45

46. Training Occupation (If Skills Training or OJT): _____ DOT: 30 32 46

000 = Not Applicable/Information Missing

47. Industry (If OJT) _____ SIC: 33 35 47

000 = Not Applicable/Information Missing

48. Final Hourly Wage (If OJT Or PSE Job): 36 39 48 $.

49. Hours Worked Per Week (If OJT Or PSE Job): 40 41 49

50. Type of Agency (If PSE Job): 42 50

1 = City/County Government
2 = State Government
3 = Other Governmental
4 = Community Based Organization/Non-Profit

51. Job Title (If PSE Job): _____ DOT: 43 51 54 - -

000.000-000 = Not Applicable/Information Missing

52. Reason for Participant's Termination From Program: 52 53

01 = Entered Employment, Self Placed
02 = Entered Employment, Agency Placed
03 = Enrolled in Full-Time Academic or Vocational School
04 = Entered Armed Forces
05 = Inter-Title CETA Transfer
06 = Enrollment in Non-CETA Funded Manpower Program
07 = Completed Program Objectives, Not Entailing Employment
08 = Was Enrolled in Upgrading Skills Program and Kept Job
09 = Time Limit Expired
10 = Exceeded Maximum Wage Rate
11 = Personal/Economic Problems
12 = Transportation Problems
13 = Pregnancy/Child Care Problems
14 = Dissatisfied with Program
15 = Finished Program But Did Not Enter Employment
16 = Other _____

53. Was Terminee, At Any Time While Participating in this CETA Program, Also Enrolled in Another CETA Program? 54 53

1 = Yes 2 = No

B. <u>Second Most Recent Program</u>

54. Title Through Which Program is Funded: 55 54

1 = Title IIB
2 = Title IIC
3 = Title IID
4 = Title IV
5 = Title VI
6 = Title VII

55. Type of Program: 56 57 55

01 = OJT
02 = Work Experience
03 = Skills Training
04 = Direct Placement/ Services Only
05 = Job Search Assistance
06 = English as a Second Language
07 = GED
08 = Basic Education
09 = PSE Job
10 = Other

56. Agency (Service Provider): _____ 56 [58 59]

57. Date Began: 57 [60 65]

58. Date Ended: 58 [66 71]

59. Number of Weeks: 59 [72 74]

60. Training Occupation (If Skills Training or OJT): _____ DOT: 60 [75 77]

000 = Not Applicable/Information Missing

61. Industry (If OJT) _____ SIC: 61 [78 80]

000 = Not Applicable/Information Missing

Card Number: [1 2] 04

I.D. Number: [3 8]

62. Final Hourly Wage (If OJT or PSE Job): 62 $ [9 12]

63. Hours Worked Per Week (If OJT or PSE Job): 63 [13 14]

64. Type of Agency (If PSE Job): 64 [15]

1 = City/County Government
2 = State Government
3 = Other Governmental
4 = Community Based/Non-Profit

65. Job Title (If PSE Job): _____ DOT: 65 [16 24]

000.000-000 = Not Applicable/Information Missing

66. Reason for Program Separation: 66 [25 26]

01 = Completed Program
02 = Inter-Title CETA Transfer
03 = Change of Program Status
04 = Personal/Economic Problems
05 = Transportation Problems
06 = Pregnancy/Child Care Problems
07 = Dissatisfied with Program
08 = Other _____

67. Was Terminee, At Any Time While Participating in this CETA Program, Also Enrolled in Another CETA Program? 67 [27]

1 = Yes 2 = No

68. (IF YES): Was Terminee Also Enrolled in Program of Termination? (Recorded in Part A) 68 [28]

1 = Yes 2 = No

C. Third Most Recent Program

69. Title Through Which Program is Funded: 29 — 69 [ ]

1 = Title IIB
2 = Title IIC
3 = Title IID
4 = Title VI
5 = Title IV
6 = Title VII

70. Type of Program: 30 31 — 70 [ ]

01 = OJT
02 = Work Experience
03 = Skills Training
04 = Direct Placement/ Services Only
05 = Job Search Assistance
06 = English as a Second Language
07 = GED
08 = Basic Education
09 = PSE Job
10 = Other

71. Agency (Service Provider): _____ 32 33 — 71 [ ]

72. Date Began: 34 39 — 72 [ ]

73. Date Ended: 40 45 — 73 [ ]

74. Number of Weeks: 46 48 — 74 [ ]

75. Training Occupation (If Skills Training or OJT): _____ DOT: 49 51 — 75 [ ]

000 = Not Applicable/Information Missing

76. Industry (If OJT) _____ SIC: 52 54 — 76 [ ]

000 = Not Applicable/Information Missing

77. Final Hourly Wage (If OJT or PSE Job): 55 58 — 77 $ [ ].[ ]

78. Hours Worked Per Week (If OJT or PSE Job): 59 60 [ ]

79. Type of Agency (If PSE Job): 61 — 79 [ ]

1 = City/County Governmental
2 = State Government
03 = Other Governmental
04 = Community Based Organization/Non-Profit

80. Job Title (If PSE Job): _____ DOT: 62 70 — 80 [ ][ ][ ].[ ][ ][ ]-[ ][ ][ ]

000.000-000 = Not Applicable/Information Missing

81. Reason for Program Separation: 71 72 — 81 [ ]

01 = Completed Program
02 = Inter-Title CETA Transfer
03 = Change of Program Status
04 = Personal/Economic Problems
05 = Transportation Problems
06 = Pregnancy/Child Care Problems
07 = Dissatisfied with Program
08 = Other _____

82. Was Terminee, At Any Time While Participating in this CETA Program, Also Enrolled in Another CETA Program? 73 82 ___

1 = Yes 2 = No

83. (IF YES): Was Terminee Also Enrolled in the Second Most Recent Program? (Recorded in Part B) 74 83 ___

1 = Yes 2 = No

Card Number: 1 2 0 5

I.D. Number: 3 8

SECTION V : PLACEMENT INFORMATION

84. Date Began Post-CETA Job: 9 14 84 ___

85. Company Name: _____ SIC: 15 17 85 ___

Address: _____

Kind of Business: _____

000 = Not Applicable/Information Missing

Telephone Number: _____

Contact Name: _____

86. Job Title: _____ DOT: 18 26 86 ___.___-___

000.000-000 Not Applicable/Information Missing

87. Beginning Hourly Wage Rate: 27 30 87 $ ___.___

88. Hours of Work Per Week: 31 32 88 ___

89. Entered a School or Non-CETA Training Program After CETA? 33 89 ___

1 = Yes, School
2 = Yes, Non-CETA Program
3 = No

School or Non-CETA Program Name: _____

Address: _____

Telephone: _____

Contact Name: _____

APPENDIX G

Sample Introductory Letters and Business Reply Postcards

Dear CETA Participant:

In an effort to find out whether your employment situation has improved as a result of your participation in the CETA program, we are conducting a follow-up study of the CETA program. The purpose of this letter is to ask for your help.

Although participation in this study is voluntary on your part, we would appreciate your help in our effort. We will be contacting you in about 2 to 3 weeks for an interview about your personal experience. The interview will take place during the early part of the evening and will last about five minutes. This is your chance to express your views (good or bad) about the program as it has affected you. Your comments will help future CETA participants.

Enclosed you will find a pre-addressed postcard. If this letter has reached you at an address other than the one originally typed on the envelope or if your telephone number has changed since you entered the program, please complete and return the postcard.

You can be assured that any information which you provide in the interview will be held in the strictest of confidence. Thank you very much for your cooperation in this study.

Suggested Text of Letter for
Individuals to be Interviewed by Telephone

Dear CETA Participants:

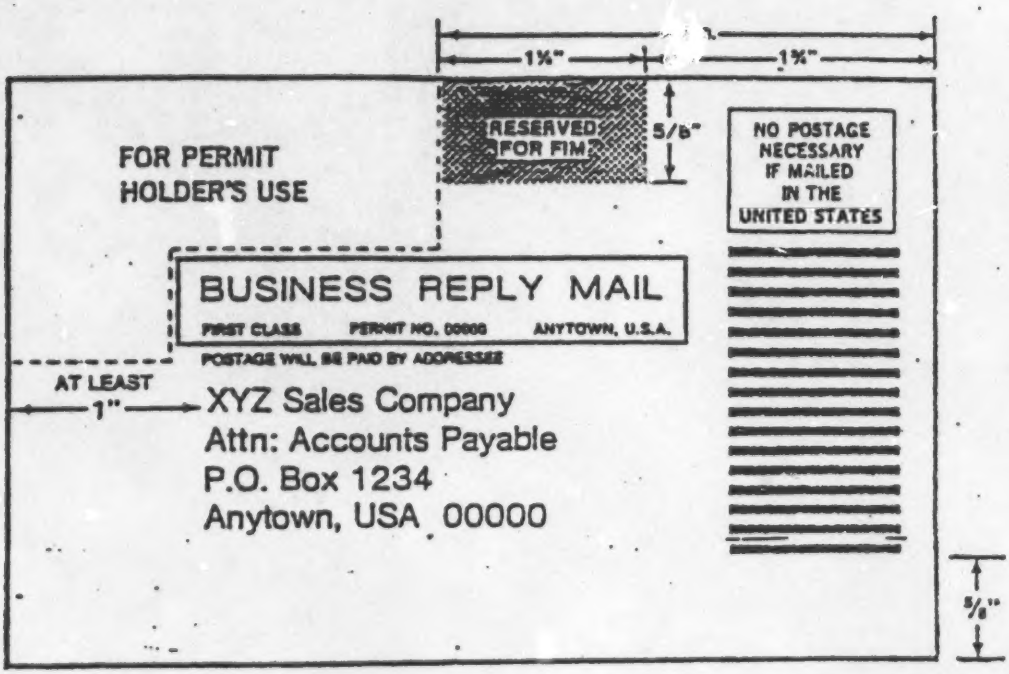
In an effort to find out whether your employment situations has improved as a result of your participation in the CETA program, we are conducting a follow-up study of the local CETA program. The purpose of this letter is to ask for your help.

Although participation in this study is voluntary on your part, we would appreciate your help in our effort. We will be contacting you by telephone in about 2 to 3 weeks to schedule a personal visit to ask you about your experience in the CETA program. The interview will take place when it is convenient for you and will last about five minutes. This is your chance to express your views (good or bad) about the program as it has affected you. Your comments will help future CETA participants.

Enclosed you will find a pre-addressed postcard. If this letter has reached you at an address other than the one originally typed on the envelope, or if your telephone number has changed since you entered the program, please complete and return the postcard.

You can be assured that any information which you provide in the interview will be held in the strictest of confidence. Thank you very much for your cooperation in this study.

Suggested Text of Letter for
Individuals to be Interviewed in Person



Requirements for Business Reply Postcard
Front Side

Please complete this card and put it in the mail.

NAME _____
(First) (Last)

ADDRESS _____
(Number) (Street)

_____
(City) (State) (Zip Code)

Phone Number _____

Suggested Text for Reverse Side of
Business Reply Postcard

Name: _____

Current Address: _____

_____

You may contact me at this telephone number:

Area Code: _____ _____

Best day(s) and time(s) to call me:

1) _____ in the ☐ morning ☐ afternoon ☐ evening
Day(s)

2) _____ in the ☐ morning ☐ afternoon ☐ evening
Day(s)

Comments: _____

Suggested Text for Reverse Side of
Business Reply Postcard

APPENDIX H

Review of Sampling Procedures

A REVIEW OF SAMPLING PROCEDURES

Introduction

The cost of collecting follow-up data is heavily influenced by the number of participants a prime sponsor includes in the study. One step which prime sponsors can take to address the issue of cost is to systematically sample participants. The purpose of sampling is to select a representative subset of participants whose post-program behavior, when analyzed, will generate the same statistical results as that of the entire population. By decreasing the number of participants used to draw statistically reliable conclusions, the overall cost of the follow-up study can be reduced.

Since the drawing of statistically sound inferences requires a specified number of participants, the success of sampling as a cost-cutting option is critically tied to the total number of participants a prime sponsor has enrolled in its programs. It is unlikely that small prime sponsors will have sufficient numbers of participants to be able to realize cost savings through the use of sampling. In the case of a small prime sponsor, the number of participants is initially very small and the accuracy of the evaluation results may be severely threatened if any sampling is undertaken. Alternatively, a large prime sponsor may be able to rigorously analyze the participant population through the examination of a properly selected sample of participants.

This appendix treats several different issues prime sponsors will need to consider when developing a sampling procedure. First, prime sponsors must determine the optimal size of the sample while considering any resource constraints they may face. Second, prime sponsors should consider the possible advantages of stratifying their sample in order to generate statistically sound results on particular subgroups or "strata" of interest in the population. Finally, prime sponsors will need to identify the specific procedures they will use for actually drawing the sample. Each of these issues is discussed in more detail below.

Sizing the Sample

Prime sponsors which suspect they are large enough to realize a reduction in costs by means of sampling must determine the optimal size of the sample. The optimal size of this sample will depend primarily on three considerations: the statistics to be calculated using the sample, the percentage error which will be tolerated in the analyses, and any resource constraints the prime sponsor faces which will limit the total number of participants who can be surveyed.

Ideally, the statistics that will be calculated from the follow-up data, given a level of tolerated error, dictate the appropriate size of the sample of participants used. Suppose the prime sponsor wants to use the starting hourly wage rate on the first job the participant held following the program as a measure of program success. The follow-up data which are collected will allow for the calculation of the average starting hourly wage rate of the sample group, call it $\bar{X}$. The prime sponsor must determine how large the sample must be so that $\bar{X}$ very closely approximates the true average starting hourly wage rate, μ, in the entire population of participants. To do this, statisticians use the Z statistic. The Z statistic is calculated as:

$$Z = \frac{\bar{X} - \mu}{\sigma / \sqrt{n}}$$

where σ is the standard deviation of the starting hourly wage rate of the population, and n is the size of the sample. The Z statistic is used because it has certain convenient properties. In particular, it has a standard normal distribution, which means that the mean of Z is zero and the standard deviation is one. Statisticians also know that if $\bar{X} = \mu$, then there is a 95 percent probability that:

$$-1.96 < Z < 1.96$$

Therefore, the sample size necessary for there to be a 95 percent probability that $\bar{X} = \mu$ is represented as:

$$n = \left[\frac{1.96\ \sigma}{\bar{X} - \mu}\right]^2$$

To determine the appropriate size of the sample, n, the standard deviation, σ, must be known and the acceptable level of error in $\bar{X}$ identified. As the actual value of σ is not known, an estimate must be found which bears some relationship to the true σ. One source of data prime sponsors have available for estimating the standard deviation is the Management Information System (MIS). Prime sponsors are required to obtain an hourly wage rate for each participant placed in a job upon termination. From this information, an estimate of the mean wage rate, μ , and the standard deviation, σ, can be obtained.

While it is possible to calculate a sample size which minimizes the error, in fact, the determination of the optimal sample size involves a slightly more complicated set of considerations. To illustrate, suppose the average hourly wage rate is estimated at $4.00 and that the standard deviation is estimated at $1.50. The required sample sizes for these estimates for different levels of tolerated errors are shown below.

Percent of Error Allowable	$\bar{X} - \mu$	n
5%	$.20	217
2.5%	$.10	865
1%	$.04	5,403

As can be seen, increasingly stringent levels of acceptable error require the use of a larger sample size and, therefore, increase the cost of the follow-up survey.

Those prime sponsors with tight resource constraints may need to accept higher levels of potential error in order to keep the cost of their participant follow-up as low as possible. In fact, in some cases, prime sponsors may find that there is a maximum number of participants they can afford to sample given staff and resource constraints. In these situations, while the sample size, n, may be known, it will be necessary to calculate the error implied by such a sample size.

Stratifying the Sample

While the purpose of the prime sponsor evaluation system is to study the overall functioning of Title II programs, prime sponsors may find the performance of select program activities or population subgroups to be of particular interest. In order to insure that sufficient observations of these subpopulations are generated to allow reliable statistical analyses to be conducted, prime sponsors may need to use a "stratified random sample". This approach entails dividing the population into mutually exclusive categories of interest ("strata"), and drawing a random sample from within each of these. This procedure is particularly important in instances for which taking a random sample across the entire population may mean that the sample includes so few participants in some subgroup that analyses of the subgroup will have high error levels associated with them. By stratifying the sample and sampling more than the proportional number of participants in the subgroups, the error in statistics calculated for these subgroups can be reduced, usually with little effect on the error levels of the rest of the sample.

For example, suppose a prime sponsor is interested in the difference between the average starting hourly wage rates of AFDC recipients, constituting 12 percent of the population, and non-AFDC recipients, constituting 88 percent of the population. This prime sponsor can afford to sample 1500 participants. When a random sample is drawn across the entire population of participants, just 180 participants, or 12 percent of the sample, will be AFDC recipients. As can be seen in Table H-1 below, after

Table H-1: Comparison of a Random Sample and Two Stratified Ramdon Samples

	AFDC Recipients	Non-AFDC Recipients
Random Sample		
Percent of Sample	12	88
Number of Participants	180	1320
Mean Wage Rate	$3.68	$4.01
Standard Deviation	$0.89	$1.32
Error	3.5% ($0.13)	1.8% ($0.07)
Stratification Plan #1		
Percent of Sample	20	80
Number of Participants	300	1200
Error	2.7% ($0.10)	1.9% ($0.07)
Stratification Plan #2		
Percent of Sample	40	60
Number of Participants	600	900
Error	1.9% ($0.07)	2.1% ($0.09)

calculating the mean wage rates and standard deviations for AFDC recipients and non-AFDC recipients, it is apparent that the error associated with the statistics for AFDC recipients is twice as large as the error for non-AFDC recipients.

Through stratifying the sample and overrepresenting AFDC recipients, the error associated with the statistics calculated for AFDC recipients can be greatly reduced with little effect on the error of the statistics for non-AFDC recipients. For example, Table H-1 presents the results of two stratification plans. In plan 1, AFDC recipients constitute 20 percent of the sample, and non-AFDC recipients 80 percent. As can be seen from the table, even this increase in the number of AFDC recipients from 180 to 300 has allowed a decrease in the error of the mean wage of AFDC recipients from 3.5 to 2.7 percent while only permitting an increase of .1 percent in the error associated with the mean wage rate of non-AFDC recipients.

Stratification plan 2 increases the number of AFDC recipients to 600, or to 40 percent. This allows the error associated with the AFDC recipients to fall from 2.7 percent, in plan 1, to 1.9 percent. The error of the mean wage rate of non-AFDC recipients has only increased .2 percent to 2.1 percent, still close to the original level of 1.8 percent.

It is important to note that when using a stratified sample to calculate estimates of statistics on the <u>entire</u> population of participants, the sample must be weighted to reflect the true proportions of the subgroups. In the above case, the stratified samples will need to be weighted to reflect the true proportions of 12 percent AFDC recipients and 88 percent non-AFDC recipients. This means that all non-AFDC recipients in the stratified sample will be given a weight greater than one, as they are underrepresented, and all AFDC recipients will be given a weight less than one, as they are overrepresented.

For example, in the second stratification plan shown on the Table, a sample was drawn with 40 percent AFDC recipients and 60 percent non-AFDC recipients. To weight this sample for calculating estimates of statistics for the true population, AFDC

recipients would be multiplied by a weightings factor of 12%/40%, or .3, whereas non-AFDC recipients in the sample would be weighted by a factor of 88%/60%, or 1.47. By weighting the sample in this manner, reliable estimates of statistics can be calculated using the stratified sample to represent the true population.

One final consideration when determining the size of the sample is that prime sponsors should remain aware that not all participants can be located and interviewed. Thus, for instance, if only a 50 percent interview completion rate is expected, the sample size may need to be doubled to insure the same level of statistical reliability.

Drawing the Sample

Once the prime sponsor has determined the size of the sample, the next step is to actually draw the sample. The sampling procedure will vary depending upon whether the prime sponsor has an automated or manual MIS. For automated systems, the procedure for selecting a sample is generally also automated and can be performed merely by specifying a set of parameters for the computer. For manual systems, however, the procedure is somewhat more involved. Some suggestions for performing a manual sampling procedure are outlined below.

The procedure for manually selecting a sample is the same whether the sample is to be drawn from the entire population of participants or from participants in only one of many possible strata. If the sample is stratified, a sample for each strata is drawn separately. Suppose n individuals are to be included in the sample. To identify the particular n individuals, n random numbers must be drawn from a random number table. Each of the n random numbers must have a value less than the total number of terminees. If, for example, there is a total of 750 terminees in the strata or the entire population, the random number table must be searched until n random numbers are found which are less than or equal to 750. Duplicate numbers should not be selected.

The n random numbers identify the positions in the prime sponsor file held by those individuals who are to be included in the sample. Prime sponsors generally maintain their participant records in some systematic fashion, although, since there may be differences among prime sponsors in the manner in which these files are kept, it is difficult to generalize. Frequently, however, these files are maintained in numerical order according to an identification number assigned to participants at the date of enrollment. Thus, once the n random numbers are identified and the places in the file held by terminees who are to be included in the sample have been identified, the identification numbers, names and addresses should be recorded. For instance, if there are 750 total terminees, one number which could be drawn as a random number is 176. In this case, the 176th individual in the prime sponsor file should be included in the sample. Through this process, a list of terminees who will constitute the sample should be constructed.

APPENDIX I

A Review of Costs of Operating Local Prime Sponsor Follow-Up Systems

A REVIEW OF COSTS OF OPERATING LOCAL PRIME SPONSOR FOLLOW-UP SYSTEMS

One of the more important details of the design and implementation of a local follow-up system is the estimation of costs and the development of a budget. As is the case with all activities a prime sponsor undertakes, the successful operation of a follow-up system requires sound financial planning and management. Therefore, whether the work is performed in-house or by an outside contractor, reasonably precise cost estimates are necessary. The purpose of this section is twofold. First, the section presents a framework from within which prime sponsors can estimate costs. Second, the section presents an illustration of two typical budgets based upon projects which follow-up different numbers of terminees. It is hoped that this appendix will serve as a guide for prime sponsors attempting to formulate or review proposed budgets.

A prime sponsor follow-up system will incur costs in four broad budget categories regardless of the exact operational or organizational approach adopted.

1. Professional Staff Salaries

The first category includes wages and fringe benefits of staff associated with data analysis, report writing, the management of data collection activities, and the cleaning, processing and programming of data.

2. Data Collection and Processing Costs

The second category includes wages and fringe benefits of data collection staff including interviewers, coders and keypunchers. In addition, this category also includes the actual computer costs of cleaning, processing and programming follow-up data.

3. Other Direct Costs

The third category includes any wages and fringe benefits associated with secretarial work as well as costs incurred for postage, travel, telephones, printing, copying, supplies and any other office services.

4. Indirect Costs

The final category includes any expenditures for overhead costs.

The cost of operating a follow-up system is difficult to estimate since the prime sponsor can exercise considerable latitude in selecting the organizational approach which meets local needs. Services may be procured through various combinations of in-house and external resources depending upon the capability and flexibility of prime sponsor staff and the availability of outside contractors. For instance, a prime sponsor may decide to contract with an outside bidder to conduct follow-up interviews, and utilize in-house staff to process and analyze the information. Alternatively, a prime sponsor may determine that a cost efficient and effective use of resources would be to utilize existing in-house staff to conduct follow-up interviews as well as analyze the data.

The illustrative cost estimates presented in this appendix are based upon a follow-up system characterized by the following parameters:

- The use of an outside contractor to secure the majority of administrative, technical and operational follow-up services. This includes the location, contact and interview of former participants, data analysis and report writing.
- A one year contract which collects data on a continuous year-round basis.
- The use of a six month follow-up period.
- A manual MIS which necessitates that participant contact information and personal, programmatic and pre-program labor force data be generated using a manual transfer procedure.
- The use of the telephone as the primary method of participant contact.
- The use of the survey instrument contained in Appendix E.
- An interview completion rate of 50 percent.

Table I-1 presents estimates of annual budget figures for comprehensive follow-up systems established in prime sponsors of two different sizes. Prime sponsor A

Table I-1: Estimated Annual Costs for Comprehensive Follow-Up Systems

	Prime Sponsor A (750 terminees)	Prime Sponsor B (2500 terminees)
SALARIES		
Manager of Data Collection Activities: Duties: insuring procurement of MIS data; hiring, organizing and training interviewers; implementing location strategies; supervising all quality control activities; organizing mailings.	$7,500 (half time)	$15,000 (full time)
Data Analyst/Report Writer: Duties: compiling and analyzing all follow-up data; producing one comprehensive follow-up report per year; presenting report findings to relevant prime sponsor staff and advisory bodies. Should have background in CETA and/or labor market analysis.	$3,500 (full time during 2 months of report writing)	$ 3,500 (full time during 2 months of report writing)
Fringe Benefits: Includes 24 percent fringe benefit costs on Data Collection Manager and Data Analyst salaries.	$2,640	$ 4,440
Data Processor (technician): Duties: compiling a list of terminees with contact information (names and addresses); getting data onto the computer; cleaning the data; organizing the data for initial tables. Can often be a graduate student.	$4,772 (full time during 2 months of report writing; 6 days/ month for rest of year)	$ 6,158 (full time during 2 months of report writing, 9 days/ month for rest of year)
DATA COLLECTION		
Interviewing: Includes collection of demographic information and pre-program labor force histories from MIS records, participant search time, interviews, checking and coding of questionnaires. Calculated at 1 hour per non-completed interview and 1½ hours per completed interview @ $4.50 per hour.	$4,220	$14,065
Keypunching: Initial data file creation, assuming 50 percent contact rate and including verification, @ $2 per terminee.	$1,500	$ 5,000
Computer Costs: Includes most substantive programming and data runs.	$2,000	$ 3,000

Table I-1: (continued)

	Prime Sponsor A (750 terminees)	Prime Sponsor B (2500 terminees)
OTHER DIRECT COSTS		
Secretarial: Includes typing of originals of all letters and typing of follow-up reports; other miscellaneous duties such as copying and mailing.	$1,000	$1,200
Postage: Includes initial mailing plus follow-up letters for all terminees @ $.18.	$ 270	$ 900
Copying and Supplies: Includes copying of questionnaires, introductory and follow-up letters; other supplies.	$ 350	$1,125
Telephones: Varies considerably depending upon geographical dispersion of prime sponsor; no estimate given.		
Travel: Depending on the size and geographical location of the prime sponsor and the follow-up operations, travel may or may not be required; no estimate given.		
INDIRECT COSTS		
All associated overhead costs, estimated at 12 percent of the total.	$ 3,330	$ 6,527
TOTAL COST	$31,082	$60,915
COST PER TERMINEE	$ 41	$ 24

includes 750 terminees in its follow-up study while prime sponsor B attempts to follow-up 2,500 terminees. The amounts shown in the table are only estimates. If outside contractors are used, the bids submitted may vary from such estimates. It should be noted that, since the cost of living differs significantly among different regions of the country, prime sponsors may need to revise these estimates based upon local costs.

As can be seen by comparing the budget estimates for the two prime sponsors, the costs of some line items remain almost the same for both budgets, whereas the costs of other line items increase substantially from prime sponsor A to prime sponsor B. Costs which vary directly with the number of terminees are called variable costs, while those which stay fairly constant regardless of the number of terminees included in the follow-up study are referred to as fixed costs. For example, costs for such budget items as interviewing and keypunching are "variable" costs in that they increase proportionally with the number of terminees. In both budgets, the keypunching of data costs are estimated at two dollars per terminee, so that the ratio of keypunching costs between prime sponsors A and B is the same as their ratio of terminees. However, the staff salaries of the data analyst/report writer and the data processor are about the same for prime sponsors A and B. Generally, such professional staff salaries are "fixed" costs, which means that as the number of terminees increases, the proportion of overall expenditures devoted to such costs tends to decrease. In the case of prime sponsor A, 60 percent of the overall expenditure is devoted to professional staff salaries, whereas only 48 percent of the total expenditure of prime sponsor B is devoted to these salaries.

As a result of the smaller proportion of prime sponsor B's budget devoted to fixed costs, the cost per terminee incurred by the larger prime sponsor ($24 per terminee), is substantially lower than that of the smaller sponsor ($41 per terminee). This suggests the desirability of identifying ways to organize local prime sponsor follow-up systems so that they may benefit from these economies of scale. For instance, if several prime sponsors cooperate for the purpose of procuring follow-up

services, they may be able to share the cost of one data collection supervisor for the joint project. Without a cooperative effort, each prime sponsor would incur the entire cost on its own.

Cost savings may also be realized if the prime sponsor can rely upon an automated MIS. Unlike the example in the budget above, the generation of contact information, demographic, programmatic and pre-program labor market information need not rely upon the time-consuming manual transfer of data. The existence of an automated system allows the relevant data to be generated and organized in a very cost efficient manner through the simple creation of a separate data file to use in the follow-up process.

The prime sponsor can also economize by relying on in-house resources where the additional expenditures of the prime sponsor would be less than the cost of similar services obtained from an outside contractor. For example, a prime sponsor may wish to rely upon in-house secretarial assistance, particularly in instances where there may be an underutilization of these resources. Similarly, sponsors may find it more cost efficient to utilize their own computer facilities rather than those procured by an outside contractor.

Finally, it should be noted that certain cost savings can potentially be realized through the negotiation process with an outside contractor. This is particularly relevent when negotiating with universities and colleges which often have considerable latitude with respect to in-kind contributions and overhead costs. In addition, educational institutions have demonstrated a capacity to utilize flexible and creative forms of reimbursement which may affect total contract costs. For instance, students used as interviewers have received academic credit for their work while faculty members hired to analyze follow-up data and write reports have, on occasion, been partially compensated through reduced teaching schedules. Prime sponsors are encouraged to explore these options in the process of establishing a cost efficient local follow-up system.